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ABSTRACT

As part of the National Education Longitudinal Study of 1988 (NELS:88), this study examined the schools attended by eighth-graders in 1988, the year during which the more than 25,000 eighth-graders of the cohort were first studied. NELS:88 provides information on 802 public schools, 105 Catholic schools, 68 other religious schools, and 60 private, non-religious schools. Throughout the report, the unit of analysis is the school rather than students or teachers. Most of the school data were provided by school administrators. The data are used to develop a profile of the schools attended by eighth-graders, with information about various aspects of the learning environment, school policies and programs, and administrators' assessments of school climate. In 1988, 87.9% of eighth-graders attended public schools, 7.6% attended Catholic schools, 2.9% attended other religious schools, and 1.5% attended private non-religious schools. The study shows that eighth-graders learned under a wide range of different conditions in both public and private schools. Fifty-six data tables and five graphs are included. Appendices contain technical notes, information about the accuracy of estimates and procedures, standard errors and unweighted "N"s, and 56 additional tables. (SLD)

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Statistical Analysis Report September 1991

National Education Longitudinal Study of 1988

A Profile of Schools Attended by Eighth Graders in 1988

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September 1991

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Foreword

The National Education Longitudinal Study of 1988 (NELS:88) is a large-scale, national longitudinal study designed and sponsored by the National Center for Education Statistics (NCES), with support from other government agencies. NELS:88 provides a variety of data about the 1988 eighth graders as they move through the U.S. school system and into the many and varied activities of early adulthood. The study began with the group administration of questionnaires and tests to 25,000 eighth graders in more than 1,000 public and private schools in spring 1988. Data were also collected from the students' parents, teachers, and school principals. NELS:88 has continued with a second collection of information from the 1988 eighth graders in spring 1990. A third data collection, along with the collection of high school transcripts, will take place in 1992.

This study examines the schools attended by eighth graders in 1988. NELS:88 provides information on 802 public schools, 105 Catholic schools, 68 other religious schools, and 60 private, nonreligious schools. Throughout, the unit of analysis is the school, rather than students or teachers. Although some of the information on these schools was provided by the eighth graders, most of the school data were provided by school administrators. The report uses these data to develop a profile of the schools attended by American eighth graders. In addition to describing some general characteristics of these schools, the report examines various aspects of the learning environment, school policies and programs, and administrators' assessments of school climate.

The study shows that eighth graders learned under a wide range of different conditions in both public and private schools. The profile will interest those who are curious about diversity among schools and should stimulate research using NELS:88 to untangle some of the relationships between school characteristics and student outcomes.

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Numerous members of the staff of the National Center for Education Statistics provided assistance in reviewing various parts of the report. Marilyn McMillen carefully reviewed early drafts. Susan Ahmed provided important statistical advice. Special appreciation is extended to five reviewers of the final draft: John Convey, the Catholic University of America; Lee Greene, the National Association of Elementary School Principals; John Burkett of the Office of Educational Research and Improvement; and Larry Ogle and Ching Yu of the National Center for Education Statistics.

Highlights

- In 1988, 87.9 percent of eighth graders attended public schools, 7.6 percent attended Catholic schools, 2.9 percent attended other religious schools, and 1.5 percent attended private, nonreligious schools. However, of the *schools* attended by eighth graders in 1988, 58.8 percent were public, 3.7 percent were private, nonreligious schools, 18.1 percent were Catholic schools, and 19.5 percent were other religious schools.

- Private schools attended by eighth graders were more likely to be small than public schools; 58.7 percent of private schools had fewer than 250 students, compared with 22.9 percent of public schools.

- Public schools were more likely to locate 8th grade in a separate junior high school, while private schools kept 8th grade with elementary schools or schools that spanned kindergarten through 12th grade. Eighth grade was part of a junior high school or other type of school spanning grades six to eight in more than 60 percent of the public schools attended by eighth graders. In contrast, only 5.1 percent of Catholic schools, 0.4 percent of other religious schools, and 2.3 percent of private, nonreligious schools used some type of intermediate school to teach eighth grade.

- Enrollment in 27.0 percent of public schools was more than 20 percent minority, compared with 16.1 percent of private schools. Nevertheless, about 14 percent of both Catholic and public schools had enrollments that were more than 60 percent minority, as did about 6 percent of other religious schools.

- High concentrations of students living in single-parent families were much more prevalent in public schools than in private. In 40.8 percent of public schools, more than 25 percent of the students enrolled lived in single-parent families, compared with 14.6 percent of private schools. In one-third of urban, public schools, more than half the students enrolled lived in single-parent families.

- The educational aspirations of students in private schools were higher than those of public schools. However, among public schools there were no significant differences in the educational aspirations of students attending urban, suburban, or rural schools.

- On four tests of student achievement, eighth graders in private schools had higher average test scores than their public school peers. The differences were greatest between public school eighth graders and eighth graders in private, nonreligious schools.

- The pupil/teacher ratio of 16.4 in public schools was lower than the average ratio of 20.4 for all private schools. The pupil/teacher ratio for Catholic schools was 22.9, significantly higher than the ratio of 19.0 for other religious schools and 15.2 for private, nonreligious schools. The difference between the ratio of private, nonreligious schools and public schools was not statistically significant.

- Eighth graders in public schools rated the quality of their teachers lower than their counterparts in private schools. In public schools, 10.8 percent of the eighth graders gave their teachers a high rating, compared with 30.6 percent in Catholic schools, 60.0 percent in other religious schools, and 54.1 percent in private, nonreligious schools.

- Although there were few differences among types of schools in the amount of math, science, reading, or history required, private schools were much more likely than public schools to require computer education (37.2 percent of private schools versus 15.7 percent of public schools), art (57.4 percent versus 28.7 percent), music (87.8 percent versus 33.7 percent), ethics (44.4 percent versus 2.3 percent), and religion (89.6 percent versus 0.5 percent).

- Among both public and private schools, size of school was strongly associated with the percentage of schools offering various types of extracurricular activities and special programs. For example, large public schools were more likely than small public schools to offer fine arts, academic clubs, student council, school paper and yearbook, service clubs, and vocational clubs. They were also more likely to offer gifted and talented programs.

- In 50.4 percent of private schools versus 15.2 percent of public schools, administrators reported a high level of teacher engagement—good rapport between teachers and administrators, high teacher morale, and positive attitudes about students.

- In 28.6 percent of public schools versus 2.4 percent of private schools, administrators reported serious problems with student behavior—tardiness, absenteeism, fighting, vandalism, drug use, and physical and verbal abuse.

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Introduction

For many years, educators and educational researchers have grappled with questions about how to organize the middle school grades in order to create the optimal learning environment for young adolescents. They have debated about school size, grade span, grade size, degree of departmentalization, class size, curriculum, ability grouping, and discipline, among other issues. However, to date they have arrived at no clear consensus on most of these issues, and the Nation's schools providing instruction to students in the middle grades are a diverse lot.[1]

The data from the National Education Longitudinal Study of 1988 (NELS:88) provide researchers with a unique opportunity to describe the diversity of these schools in much detail. A national sample of 25,000 eighth graders, NELS:88 offers a rich source of information on the schools these students attended, including 802 public schools, 105 Catholic schools, 68 other religious schools, and 60 private, nonreligious schools. Although some of the information about the schools was supplied by the students, most of the school data were reported by school administrators and are part of the administrator data file. Appendix A provides more information on NELS:88, the sample used for this report, and the procedures used to construct many of the variables that were included in this study.

This report provides a profile of the schools attended by American eighth graders in 1988. It should be stressed that throughout, the unit of analysis is the school, rather than students or teachers. First, section 1 describes some of the general characteristics of these schools such as school size, grade size, grade span, and urbanicity. Section 2 examines the student characteristics of these schools, discussing such variables as the racial–ethnic composition of the student body, the students' family conditions, postsecondary aspirations, and levels of academic achievement. Next, section 3 describes some basic characteristics of the learning environment, including length of school year and day, student/teacher ratios, racial–ethnic composition of faculty, and teacher qualifications. Section 4 discusses school policies and programs, including the diversity of extracurricular offerings and course requirements. Concluding this report, section 5 discusses administrators' assessments of the general school climate with respect to level of teacher engagement, student behavior, emphasis on academics, degree of school control, and student discipline.

Throughout, the data are reported separately for public and private schools. Data for private schools are further distinguished among Catholic, other religious, and private, nonreligious schools. In many instances, these three types of private schools were quite

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[1]For discussion of a wide range of issues about the middle school years, see Joyce L. Epstein, "What Matters in the Middle Grades—Grade Span or Practices?" *Phi Delta Kappan* (February 1990): 438–444; Jomills H. Braddock II, "Tracking the Middle Grades: National Patterns of Grouping for Instruction," *Phi Delta Kappan* (February 1990): 445–449; Henry J. Becker, "Curriculum and Instruction in Middle-Grade Schools," *Phi Delta Kappan* (February 1990): 440–457; Douglas J. MacIver, "Meeting the Needs of Young Adolescents: Advisory Groups, Interdisciplinary Teaching Teams, and School Transition Programs," *Phi Delta Kappan* (February 1990): 458–464; James M. McPartland, "Staffing Decisions in the Middle Grades," *Phi Delta Kappan* (February 1990): 465–469; Carnegie Task Force on Education of Young Adolescents, *Turning Points: Preparing American Youth for the 21st Century* (New York: Carnegie Council on Adolescent Development of the Carnegie Corporation, 1989); California State Department of Education, *Caught in the Middle: Educational Reform for Young Adolescents in California Public Schools* (Sacramento, Ca.: California State Department of Education, 1987); and William M. Alexander and Paul S. George, *The Exemplary Middle School* (New York: Holt, Rinehart and Winston, 1981).

different from one another, so that reporting aggregated data for private schools as a single group blurs significant differences among these three types.[2]

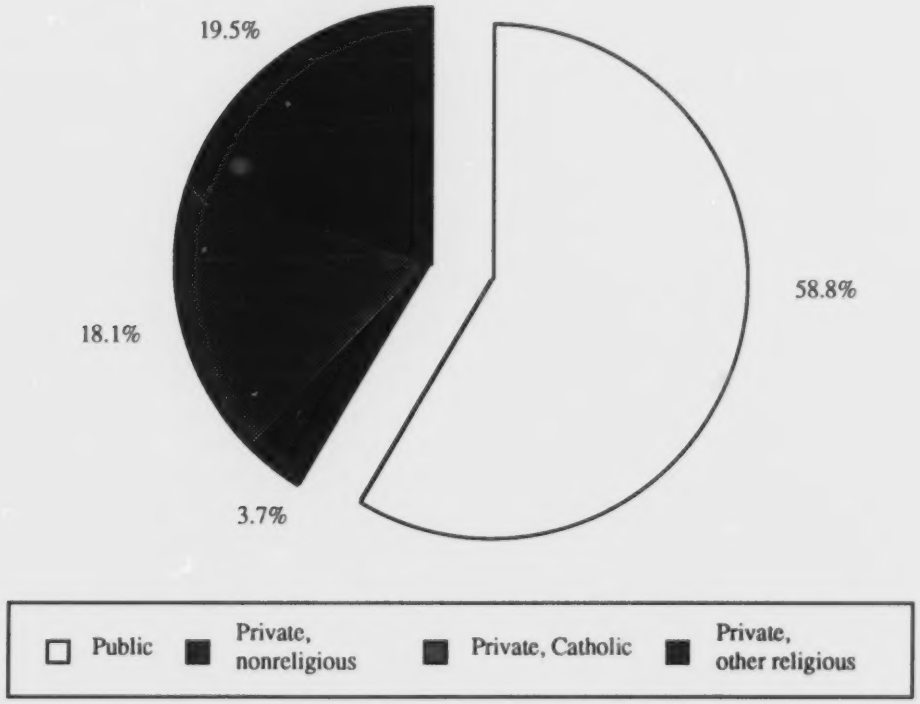
The report is descriptive and does not include any multivariate analysis. Its findings will be familiar to readers who know schools and should suggest directions for future research and analysis. Additionally, the findings should be of interest to parents and the general public.

[2]Differences among types of schools explicitly cited in the text were found to be statistically significant at a level of 0.05 or lower. Additionally, when comparisons for more than one pair were made, significance was further tested with a stricter Bonferroni test (appendix B). Because of relatively small sample sizes for other religious and private, nonreligious schools, there were sometimes large standard errors associated with some estimates. Consequently, large differences in the means of different types of schools may not be statistically significant. Thus, the reader should use caution when making comparisons of means in the tables included in this report, but not explicitly discussed in the text. Appendix C includes standard errors and the unweighted sample size for all estimates reported in the tables, and the reader is encouraged to calculate *t* tests when comparing estimates.

1. General School Characteristics

In 1988, 87.9 percent of eighth graders attended public schools, 7.6 percent attended Catholic schools, 2.9 percent attended other religious schools, and 1.5 percent attended private, nonreligious schools. The distribution of *schools* by institutional type, however, was quite different from the distribution of students. Thus, of the schools attended by eighth graders in 1988, 58.8 percent were public, 18.1 percent were Catholic, 19.5 percent were other religious, and 3.7 percent were private, nonreligious schools (figure 1.1, table 1.1). This section describes some general characteristics of these schools, examining school and grade size, grade span, departmentalization, and urbanicity.

Figure 1.1--Percentage of schools attended by eighth graders, by institutional type: 1988



SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table 1.1--Percentage of schools attended by eighth graders, by institutional type: 1988

Public	Private			
	All schools*	Catholic	Other religious	Non-religious
58.8	41.2	18.1	19.5	3.7

*The three types of private schools individually sum to 41.3 because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

School Size

Private schools that eighth graders attended were much more likely to be small than public schools; 58.7 percent of private schools had fewer than 250 students, compared with 22.9 percent of public schools (table 1.2). In contrast, 35.4 percent of public schools had between 500 and 1,000 students, compared with only 10.4 percent of private schools, and 6.9 percent of public schools had more than 1,000 students, compared with only 0.2 percent of private schools.

Among private schools, there were differences in size. Private, other religious schools, on the average, were smaller than Catholic schools. For example, 70.9 percent of private, other religious schools had fewer than 250 students, compared with only 49.4 percent of Catholic schools. Private, nonreligious schools appeared to be larger, on the average, than both Catholic and other religious schools, but this difference was not statistically significant.

Table 1.2--Percentage of schools attended by eighth graders, by institutional type, by school size: 1988

School size	Public	Private			
		All schools	Catholic	Other religious	Non-religious
1 to 249	22.9	58.7	49.4	70.9	39.9
250 to 499	34.8	30.7	41.5	20.1	34.2
500 to 999	35.4	10.4	9.0	9.1	24.9
1,000+	6.9	0.2	0.2	0.0	1.1
Total	100.0	100.0	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Public schools with fewer than 250 students were located mainly in rural areas. While 34.8 percent of rural public schools had fewer than 250 students, only 2.3 percent of urban public schools serving eighth graders had fewer than 250 students (table 1.3).

Table 1.3--Percentage of public schools attended by eighth graders, by urbanicity, by school size: 1988

School size	Urban	Suburban	Rural
1 to 249	2.3	13.0	34.8
250 to 499	19.0	35.0	38.8
500 to 999	56.8	43.2	24.7
1,000+	21.9	8.9	1.7
Total	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Grade Size

The size of the eighth grade class was much more likely to be small in private schools than in public schools. Overall, 55.1 percent of private schools had an eighth grade with fewer than 21 students, compared with only 15.4 percent of public schools. The percentage of private schools with an eighth grade containing fewer than 21 students ranged from 32.8 percent for Catholic schools to 77.9 percent for other religious schools. In contrast, 25.0 percent of the public schools had an eighth grade class with more than 200 students, while none of the Catholic and other religious schools had an eighth grade this large. Only 0.2 percent of the private, nonreligious schools had an eighth grade with more than 200 students (table 1.4).

Table 1.4--Percentage of schools attended by eighth graders, by institutional type, by size of eighth grade: 1988

Size of eighth grade	Public	Private			
		All schools	Catholic	Other religious	Non-religious
1 to 20	15.4	55.1	32.8	77.9	44.5
21 to 30	5.4	20.2	31.8	10.0	16.4
31 to 50	11.3	15.5	23.2	8.1	17.3
51 to 199	42.9	9.2	12.3	4.0	21.6
200+	25.0	(*)	(*)	(*)	0.2
Total	100.0	100.0	100.0	100.0	100.0

*Less than 0.05.

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Public schools with fewer than 21 students in the eighth grade were virtually all located in rural areas. In 26.3 percent of public rural schools, the eighth grade contained fewer than 21 students, while none of the urban public schools and only 4.7 percent of the suburban schools had an eighth grade with fewer than 21 students (table 1.5). More than half of urban public schools had an eighth grade with more than 200 students.

Table 1.5--Percentage of public schools attended by eighth graders, by urbanicity, by size of eighth grade: 1988

Size of eighth grade	Urban	Suburban	Rural
1 to 20	0.0	4.7	26.3
21 to 30	4.2	1.8	8.0
31 to 50	4.8	11.1	13.2
51 to 199	36.1	46.8	42.2
200+	55.0	35.6	10.3
Total	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Grade Span

Public schools were more likely to locate 8th grade in a separate junior high school, middle school, or other intermediate school, while private schools kept 8th grade either with elementary schools or with schools that spanned kindergarten through 12th grade (table 1.6). For example, in 93.0 percent of Catholic schools and 69.0 percent of other religious schools, 8th grade was typically part of an elementary school, compared with only 20.2 percent of public schools; and in 77.6 percent of private nonreligious schools, 8th grade was part of a school spanning kindergarten or 1st grade through 12th grade, compared with 19.5 percent of public schools. Indeed, "middle schools" were almost exclusively public; in about 60 percent of public schools, eighth grade was part of a junior high school or other type of school spanning grades six, seven, eight, or nine, while only 2.7 percent of private schools were organized in this fashion.

Table 1.6--Percentage of schools attended by eighth graders, by institutional type, by grade span: 1988

Grade span	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Elementary	20.2	75.6	93.0	69.0	20.2
6 to 8	26.1	0.1	0.1	0.0	1.0
7 to 8	13.9	1.8	3.3	0.7	0.3
Jr. high	10.0	0.8	1.7	0.0	1.0
Other intermediate	10.3	0.0	0.0	0.0	0.0
Other*	19.5	21.7	1.9	30.3	77.6
Total	100.0	100.0	100.0	100.0	100.0

*These other schools are schools spanning kindergarten or 1st grade through 12th grade.

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Public middle schools were much more prevalent in urban and suburban areas than in rural ones. More than three-quarters (78.2 percent) of the urban public schools serving eighth graders were middle schools, compared with 69.7 percent of suburban public schools and 47.4 percent of rural public schools (table 1.7). Moreover, eighth grade was included in K-12 schools in 29.1 percent of rural public schools, compared with 14.2 percent of suburban public schools, and 2.1 percent of urban public schools.

Table 1.7--Percentage of public schools attended by eighth graders, by grade span, by urbanicity: 1988

Urbanicity	Elementary	6 to 8	7 to 8	Jr. high	Other intermediate	K-12 and other	Total
Urban	19.8	40.2	15.9	19.4	2.7	2.1	100.0
Suburban	16.0	30.0	17.5	10.7	11.5	14.2	100.0
Rural	23.5	18.7	10.6	6.4	11.7	29.1	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Departmentalization

Except for 30.7 percent of other religious schools that were self-contained, almost all schools attended by eighth graders were either departmentalized or semi-departmentalized (table 1.8).[3] More than 80 percent of the public schools were departmentalized, and 13.9 percent were semi-departmentalized. Fifty-five percent of Catholic schools were departmentalized, and 43.9 percent were semi-departmentalized. All private, nonreligious schools were departmentalized. Almost one-third of the other religious schools were self-contained, about one-third departmentalized, and slightly more than one-third semi-departmentalized.

Table 1.8--Percentage of schools attended by eighth graders, by institutional type, by departmentalization: 1988

	Public	Private			
Departmentalization		All schools	Catholic	Other religious	Non-religious
Self-contained	5.4	14.7	1.1	30.7	0.0
Departmentalized	80.7	49.0	55.0	33.0	100.0
Semi-department.	13.9	36.3	43.9	36.3	0.0
Total	100.0	100.0	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

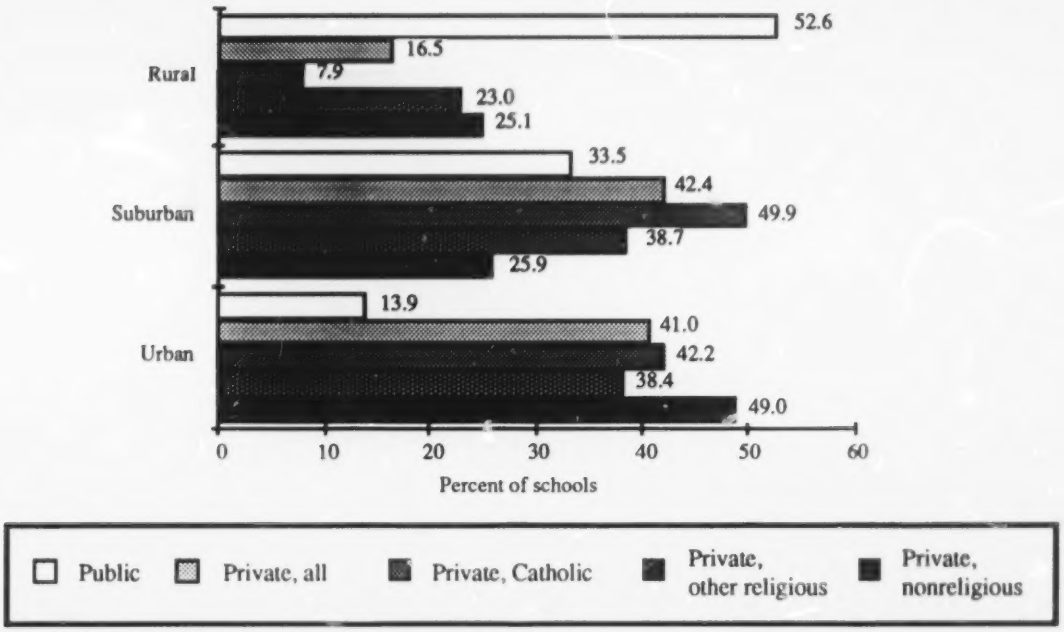
SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Urbanicity

Private schools were much more likely to be located in urban areas than were public schools. For example, 42.2 percent of Catholic schools, 38.4 percent of other religious schools, and 49.0 percent of private, nonreligious schools were urban, compared with only 13.9 percent of public schools (figure 1.2, table 1.9). In contrast, 52.6 percent of public schools were located in rural areas, compared with 7.9 percent of Catholic schools, and 23.0 percent of other religious schools.

[3]In "self-contained schools," the same students are taught by one or more teachers for all or part of the day. In a "departmentalized school," students are taught by different teachers for each subject. In a "semi-departmentalized school," students are taught by different teachers for some of their subjects.

Figure 1.2--Percentage of schools attended by eighth graders, by institutional type, by urbanicity: 1988



NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table 1.9--Percentage of schools attended by eighth graders, by institutional type, by urbanicity: 1988

Urbanicity	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Urban	13.9	41.0	42.2	38.4	49.0
Suburban	33.5	42.4	49.9	38.7	25.9
Rural	52.6	16.5	7.9	23.0	25.1
Total	100.0	100.0	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

In summary, private schools attended by eighth graders were typically much smaller than public schools, more likely to be in urban areas, and spanned grades K-8 or K-12, rather than specializing in the middle grades. To some extent, private schools did not specialize in the middle grades simply because of their size; most were not large enough to do so. However, even among larger Catholic schools, where specialization might have occurred more often, the dominant pattern was to include eighth grade in schools that spanned kindergarten through eighth grade rather than establish separate middle schools. In contrast, public schools were much more likely to specialize in the middle grades, except in rural areas where sparsity and the size of the school-age population required schools to serve a wider grade span.

2. Characteristics of Students by Type of School

The characteristics of the student body varied greatly by type of school. This section describes the racial–ethnic composition of the schools attended by eighth graders, family conditions, and students' postsecondary aspirations and levels of academic achievement.

Racial–Ethnic Composition

Generally, public schools were more likely than private schools to have large concentrations of minority students. Enrollment in 27.0 percent of public schools was more than 20 percent minority, compared with 16.1 percent of private schools (table 2.1, figure 2.1). However, there were significant differences with respect to type of private school. The percentage of Catholic schools with more than 20 percent minority students, 22.3 percent, was not significantly different from that of public schools. However, the percentages of private, other religious schools and private, nonreligious schools with more than 20 percent minority students—11.0 percent and 12.5 percent, respectively—were significantly lower than those of public schools. Additionally, about 14.1 percent of both public and Catholic schools had student bodies that were more than 60 percent minority, a significantly larger percentage than the 1.4 percent of private, nonreligious schools. Although the percentage of private, other religious schools with more than 60 percent minority students, 6.2 percent, appeared lower than the percentages of public and Catholic schools, these differences were not statistically significant. Also, 76.0 percent of other religious schools enrolled no minority students, compared with 33.3 percent of Catholic schools and 25.5 percent of public schools.

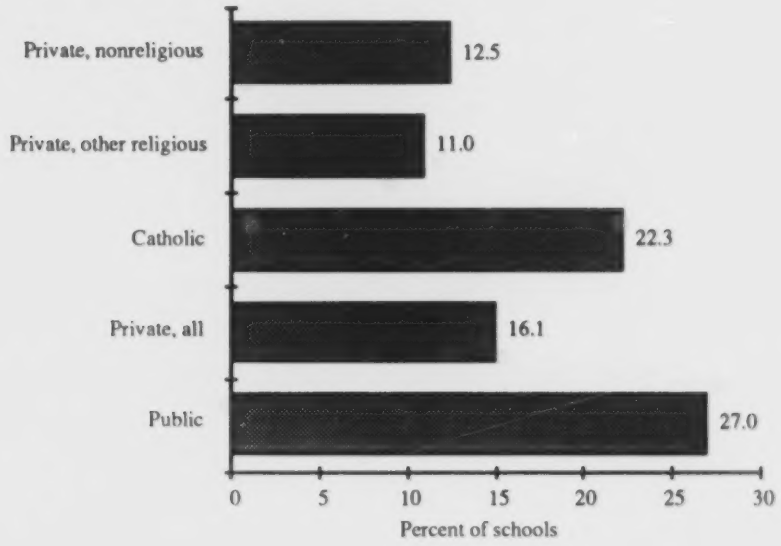
Table 2.1--Percentage of schools attended by eighth graders, by institutional type, by percentage of minorities enrolled: 1988

Percent minority	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None	25.5	54.5	33.3	76.0	48.1
<5 percent	25.9	14.7	24.8	6.6	7.1
6 to 20 percent	21.7	14.7	19.6	6.5	32.3
21 to 60 percent	12.9	6.9	8.2	4.8	11.1
>60 percent	14.1	9.2	14.1	6.2	1.4
Total	100.0	100.0	100.0	100.0	100.0
>20 percent	27.0	16.1	22.3	11.0	12.5

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Figure 2.1--Percentage of schools attended by eighth graders with more than 20 percent minority students enrolled, by institutional type: 1988



SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Public schools were much less likely to have no black students enrolled than private schools. Thus, 47.0 percent of public schools had no black students enrolled, compared with 69.4 percent of private schools. Although all three types of private schools appeared more likely than public schools to have no black students enrolled, the differences were statistically significant only for private, other religious schools where 81.8 percent of the schools had no blacks enrolled. Interestingly, however, 7.2 percent of private other religious schools had enrollments that were more than 50 percent black, about the same as the percentage of public schools, 9.7 percent, and Catholic schools, about 7 percent. Private, nonreligious schools were less likely than public schools to have enrollments that were more than 10 percent black; 24.4 percent of public schools had enrollments with more than 10 percent black students, compared with only 11.2 percent of private, nonreligious schools.

Table 2.2--Percentage of schools attended by eighth graders, by institutional type, by percentage of black students enrolled: 1988

Percent black	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None	47.0	69.4	57.3	81.8	63.0
<2 percent	16.2	6.0	8.1	3.5	8.8
3 to 10 percent	12.3	10.7	16.7	4.1	17.0
11 to 50 percent	14.7	7.1	10.4	3.5	9.8
>50 percent	9.7	6.8	7.6	7.2	1.4
Total	100.0	100.0	100.0	100.0	100.0
>10 percent	24.4	13.9	18.0	10.7	11.2

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Although private, nonreligious and other religious schools were less likely to enroll Hispanic students than public schools, there were no statistically significant differences between public and Catholic schools in this distribution by percentage of Hispanic students enrolled. In fact, 86.9 percent of other religious schools and 79.7 percent of private, nonreligious schools enrolled no Hispanic students, compared with 56.1 percent of Catholic schools and 51.6 percent of public schools (table 2.3). About the same percentage of public and Catholic schools, 15 percent, had an Hispanic enrollment of 11 percent or more.

Table 2.3--Percentage of schools attended by eighth graders, by institutional type, by percentage of Hispanic students enrolled: 1988

Percent Hispanic	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None	51.6	72.8	56.1	86.9	79.7
<2 percent	20.3	7.5	12.2	2.6	10.1
3 to 10 percent	13.0	10.8	17.3	4.9	10.0
11 to 50 percent	10.7	5.6	9.1	3.5	0.1
>50 percent	4.4	3.3	5.4	2.1	0.0
Total	100.0	100.0	100.0	100.0	100.0
More than 10 percent	15.1	8.9	14.6	5.6	0.1

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

The percentage of public schools enrolling no Asian students, 66.1 percent, was the same for Catholic schools and was not significantly different from that of private, nonreligious schools, 56.5 percent (table 2.4). The percentage of other religious schools enrolling no Asian students was greater, 87.0 percent. About 99 percent of all three types of private schools and about 81 percent of public schools enrolled no Native Americans (table 2.5).

Table 2.4--Percentage of schools attended by eighth graders, by institutional type, by percentage of Asian students enrolled: 1988

Percent Asian	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None	66.1	75.2	66.1	87.0	56.5
<2 percent	22.0	10.1	15.8	5.1	8.4
3 to 10 percent	9.3	10.6	13.0	5.8	24.9
>10 percent	2.7	4.1	5.1	2.1	10.1
Total	100.0	100.0	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table 2.5--Percentage of schools attended by eighth graders, by institutional type, by percentage of Native American students enrolled: 1988

Percent Native American	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None	80.8	99.6	99.4	100.0	98.2
<2 percent	8.5	0.1	0.0	0.0	1.3
3 to 10 percent	7.2	0.3	0.6	0.0	0.5
>10 percent	3.5	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Home Conditions

Public schools were much more likely than private schools to enroll students from single-parent families. In 40.8 percent of public schools, more than 25 percent of the students enrolled lived in single-parent families, compared with 14.6 percent of private schools (table 2.6). There was, however, considerable variation among types of private schools. For example, while 39.3 percent of private, other religious schools had no students from single-parent families enrolled, only 3.5 percent of Catholic schools had no children with single parents. Indeed, on this measure, no significant difference existed between Catholic and public schools, of which only 4.5 percent had no students with single parents. It appears that private, nonreligious schools were also more likely to have no students with single parents, but the differences between these schools and public and Catholic schools were not statistically significant.

Table 2.6--Percentage of schools attended by eighth graders, by institutional type, by percentage of students from single-parent families: 1988

Percent single-parent families	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None	4.5	22.2	3.5	39.3	20.6
1 to 25 percent	54.7	63.2	75.2	50.6	73.2
26 to 50 percent	31.2	7.1	15.7	0.2	3.6
>50 percent	9.6	7.5	5.6	10.0	2.6
Total	100.0	100.0	100.0	100.0	100.0
>25 percent	40.8	14.6	21.3	10.2	6.2

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Among urban public schools, the percentage of schools with high concentrations of students from single-parent families was very high. For example, 39.6 percent of urban public schools enrolled 26 percent to 50 percent of their students from single-parent families; 33.7 percent of urban public schools enrolled more than half of their students from single-parent families (table 2.7). In contrast, only 19.3 percent of urban Catholic schools enrolled 26 percent to 50 percent of their students from single-parent families, and only 9.2 percent of urban Catholic schools enrolled more than half of their students from single-parent families.

Table 2.7--Percentage of urban public and Catholic schools attended by eighth graders, by percentage of students from single-parent families: 1988

	Urban public	Urban Catholic
None	0.0	1.0
1 to 25 percent	26.7	70.5
26 to 50 percent	39.6	19.3
>50 percent	33.7	9.2
Total	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Among the public schools, 7.8 percent had students with limited English proficiency enrolled, compared with 3.1 percent of the private schools (table 2.8). None of the private, nonreligious schools had students with limited English proficiency enrolled. While overall the public schools did not differ greatly from Catholic schools in enrollments of students with limited English proficiency, there were dramatic differences between urban public and urban Catholic schools. For instance, 22.3 percent of urban public schools had students with limited English proficiency enrolled, compared with only 4.0 percent of urban Catholic schools.

Table 2.8--Percentage of schools attended by eighth graders, by institutional type, by presence of students with limited English proficiency (LEP): 1988

Students with limited English	Public		Private				
	All schools	Urban schools	All schools	All Catholic	Urban Catholic	Other religious	Non-religious
None	92.2	77.7	96.9	96.7	96.0	96.5	100.0
Some	7.8	22.3	3.1	3.3	4.0	3.5	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Future Education Plans

On the average, 12.2 percent of the eighth graders in public schools said that they planned no further formal education after completing high school, compared with 4.9 percent of eighth graders in Catholic schools, 4.5 percent in other religious schools, and 1.9 percent in private, nonreligious schools (table 2.9). In the public schools, 58.8 percent of the eighth graders planned to obtain a bachelor's degree or higher. Comparable percentages for all three types of private schools were significantly higher. In Catholic schools, 75.8 percent of eighth graders planned to obtain a bachelor's degree or higher, as did 77.0 percent of the eighth graders in other religious schools and 86.8 percent in private, nonreligious schools. Only 1.7 percent of the eighth graders in public schools and less than 0.5 percent in private schools said they planned to drop out of high school.

Table 2.9--Schools attended by eighth graders, by institutional type, by percentage of students with different types of future education plans: 1988

Education plans	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Drop out of high school	1.7	0.2	0.4	0.1	0.1
Finish high school only	12.2	4.4	4.9	4.5	1.9
Attend postsecondary vo-tech	11.2	5.7	5.9	5.9	3.5
Attend some college	16.0	12.4	13.0	12.6	7.8
Finish 4-year college	39.8	48.7	46.4	52.6	39.9
Attend graduate school	19.0	28.6	29.4	24.4	46.9
Total	100.0	100.0	100.0	100.0	100.0
Any postsecondary education	86.1	95.4	94.8	95.5	98.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

On the average, graduate school figured prominently in the plans of 46.9 percent of the eighth graders in private, nonreligious schools, compared with 24.4 percent of students in other religious schools, 29.4 percent in Catholic schools, and 19.0 percent in public schools. A higher percentage of eighth graders in public schools (11.2 percent) planned to attend postsecondary vocational-technical schools than eighth graders in Catholic schools (5.9 percent) and private, nonreligious schools (3.5 percent).

Interestingly, there were virtually no differences in the educational aspirations of eighth graders attending urban public schools versus those attending suburban or rural public schools. Only 2.0 percent of urban eighth graders planned to drop out, as did 1.3 percent of suburban eighth graders and 1.9 percent of rural students (table 2.10). About 86 percent of urban, suburban, and rural public school eighth graders all aspired to some postsecondary education. Although a somewhat lower percentage of urban students planned to finish college, 35.8 percent, than suburban eighth graders, 41.5 percent, the difference was not great. Moreover, about the same percentage of urban and suburban public school eighth graders aspired to graduate school.

Table 2.10--Public schools attended by eighth graders, by urbanicity, by percentage of students with different types of future education plans: 1988

Education plans	Urban	Suburban	Rural
Drop out of high school	2.0	1.3	1.9
Finish high school only	12.4	10.8	13.0
Attend postsecondary vo-tech	11.8	10.6	11.5
Attend some college	15.8	14.5	17.0
Finish 4-year college	35.8	41.5	39.8
Attend graduate school	22.3	21.3	16.7
Total	100.0	100.0	100.0
Any postsecondary education	85.6	87.9	85.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Test Scores

Psychological and achievement tests were administered to the eighth graders participating in NELS:88. The psychological tests sought to measure students' self-concept and locus of control. Students who scored high on the measure of self-concept were those who indicated that they agreed strongly with such statements as "I feel good about myself;" "I feel I am a person of worth, the equal of other people;" "I am able to do things as well as most other people;" and "On the whole, I am satisfied with myself." Students who scored high on the measure of locus of control were those who strongly disagreed with such statements as "In my life, good luck is more important than hard work for success;" "Every time I try to get ahead, something or somebody stops me;" and "My plans hardly ever work out, so planning only makes me unhappy."

Overall, there was no statistically significant difference between public and private schools in the percentage of students receiving high scores on measures of self-concept. Although it appears that a higher percentage of Catholic school students, 38.3 percent, and students in private, nonreligious schools, 39.2 percent, scored higher on these indicators than did public school students, 33.9 percent (table 2.11), these differences were not statistically significant. On measures of locus of control, 32.4 percent of public school students obtained a high score, compared with 42.5 percent of private school students. The percentages of students with high scores on locus of control were greater in other religious schools than in Catholic schools, 45.9 percent compared with 39.5 percent. Although the percentage of students with high scores in private, nonreligious schools (39.9 percent) also appeared higher than that of public schools, this difference was not statistically significant.

Table 2.11--Schools attended by eighth graders, by institutional type, by percentage of students with high scores on psychological tests: 1988

Test	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Self-concept	33.9	38.7	38.3	39.0	39.2
Locus of control	32.4	42.5	39.5	45.9	39.9

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

On four tests of student achievement, eighth graders in private schools had average test scores that were higher than those of public school eighth graders. Overall, students in private schools scored higher than public school students on all four tests. In general, the differences were greatest between public school eighth graders and their peers in private, nonreligious schools. The smallest differences typically occurred between Catholic and public schools. Specifically, eighth graders in public schools had an average score of 49.7 in math versus 51.6 for eighth graders in Catholic schools, 49.6 in reading versus 53.3, 50.0 in science versus 51.5, and 49.7 in history versus 53.5 (table 2.12). Although test scores in private, nonreligious schools were higher on all four tests than scores in Catholic schools, these differences were not statistically significant.

Table 2.12--Average achievement test scores of eighth graders, by institutional type: 1988

Test*	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Math	49.7	52.7	51.6	53.4	54.9
Reading	49.6	54.1	53.3	54.8	54.6
Science	50.0	52.0	51.5	52.1	54.0
History	49.7	53.0	53.5	52.3	54.5

*These test scores are standardized scores with a mean of 50 and a standard deviation of 10.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Test scores in urban public schools were significantly lower than those in suburban and rural public schools. Scores in urban public schools averaged between 45.5 and 46.3 on tests of math, reading, science, and history, compared with scores averaging between 49.8 and 50.9 in suburban and rural schools (table 2.13).

Table 2.13--Average achievement test scores of eighth graders in public schools, by urbanicity: 1988

Test	Urban	Suburban	Rural
Math	45.8	50.8	50.0
Reading	46.3	50.5	49.8
Science	45.5	50.5	50.9
History	46.3	50.6	50.0

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

In summary, there were major differences between public and private schools in the characteristics of the students they served. Generalizations, however, must be made with care, because public and private schools varied substantially. In some respects, Catholic schools resembled public schools more than they did other religious schools or private, nonreligious schools. About one-quarter of public and Catholic schools had enrollments that were more than 20 percent minority, with these schools tending to enroll black and Hispanic students in about the same proportions. Although Catholic schools enrolled much higher percentages of students from single-parent families than did other private schools, the percentages of students from single-parent families were even higher in public schools, especially in urban areas. In terms of students' future educational plans and scores on various tests, however, Catholic schools were more like other private schools. In fact, students in Catholic schools were much more likely than their counterparts in public schools to aspire to 4 years or more of postsecondary education. They also scored higher on tests of locus of control. Finally, students in Catholic schools also scored higher than those in public schools on achievement tests in math, reading, science, and history.

3. Characteristics of the Learning Environment

Eighth graders were exposed to a variety of learning environments, which differed within and among types of schools. This section describes several key features of the learning environment, including length of school year and day, student/teacher ratios, racial–ethnic composition of faculty, and teacher qualifications.

Length of School Year

Compared with 5.0 percent of public schools, 14.7 percent of private schools had a school year lasting fewer than 175 days (table 3.1). Although it appears that all three types of private schools were more likely than public schools to have a shorter school year, the difference between public and private was statistically significant only for private, nonreligious schools. A higher percentage of public schools (65.0 percent) had a school year of 180 days or more, compared with other religious schools (52.0 percent). There were no statistically significant differences, however, between the percentage of public schools and those of Catholic schools and private, nonreligious schools having 180 days or more.[4]

Table 3.1--Percentage of schools attended by eighth graders, by institutional type, by length of school year: 1988

Length of school year	Public	Private			
		All schools	Catholic	Other religious	Non-religious
130 to 174 days	5.0	14.7	13.4	14.6	21.3
175 days	19.8	14.1	11.4	15.6	19.4
176 to 179 days	10.2	13.6	10.8	17.9	5.7
180 days	55.6	49.4	61.0	41.7	33.0
>180 days	9.4	8.2	3.5	10.3	20.7
Total	100.0	100.0	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

[4]Although it appears that a higher percentage of private, nonreligious schools operated more than 180 days, 20.7 percent, than did public schools, 9.4 percent, this difference was not statistically significant.

Among the public schools, rural schools were more likely to have a shorter school year than urban schools. For example, 7.2 percent of rural schools had a school year of fewer than 175 days versus 0.8 percent of urban schools (table 3.2). In contrast, 20.6 percent of urban public schools had a school year of more than 180 days, compared with 3.8 percent of rural public schools. A higher percentage of suburban schools, 13.6 percent, also operated a longer school year than rural schools.

Table 3.2--Percentage of public schools attended by eighth graders, by urbanicity, by length of school year: 1988

Length of school year	Urban	Suburban	Rural
130 to 174 days	0.8	3.3	7.2
175 days	16.5	22.0	19.2
176 to 179 days	11.3	7.9	11.3
180 days	50.8	53.2	58.5
>180 days	20.6	13.6	3.8
Total	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Characteristics of the School Day

The average length of the school day in public schools was 6.5 hours, slightly longer than the 6.2 hours in Catholic schools, but shorter than the 6.8 hours in other religious schools and 6.9 hours in private, nonreligious schools (table 3.3). All types of schools averaged about 7 classes per day, with no statistically significant differences among types. Consequently, among schools the major difference in the length of the school day was the average length of each class rather than the number of classes offered daily. For instance, the average length of each class was 48.3 minutes in public schools, 45.3 minutes in Catholic schools, and 52.0 minutes in private, nonreligious schools. Average daily attendance was higher in Catholic schools (95.9 percent) and in private, other religious schools (96.0 percent) than in public schools (93.8 percent), but there was no significant difference between public and private, nonreligious schools (94.0 percent).

Table 3.3--Schools attended by eighth graders, by institutional type, by characteristics of the school day: 1988

School day features	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Avg. day length (hrs.)	6.5	6.5	6.2	6.8	6.9
Avg. classes/day	7.1	7.2	7.2	7.2	6.9
Avg. class length (min.)	48.3	46.1	45.3	45.7	52.0
Avg. daily attend. (%)	93.8	95.8	95.9	96.0	94.0

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Among public schools, the average length of the school day was somewhat longer in rural schools, 6.6 hours, than in urban schools, 6.4 hours (table 3.4). Rural public schools also averaged more classes per day than urban public schools, 7.2 versus 6.9, and classes in rural schools were slightly longer on average, 49.1 minutes versus 47.6 minutes. Hence, the tendency for rural public schools to have shorter school years than urban schools may have been offset, at least in part, by longer days and more classes per day. Average daily attendance was higher in rural public schools (94.3 percent) and suburban public schools (94.0 percent) than in urban public schools (91.7 percent). However, average daily attendance in urban Catholic schools (95.7 percent) exceeded that of public schools in both urban and suburban locations.

Table 3.4--Schools attended by eighth graders, by urbanicity, by characteristics of the school day: 1988

School day features	Urban		Suburban	Rural
	Public	Catholic	Public	Public
Avg. day length (hrs.)	6.4	6.3	6.5	6.6
Avg. classes/day	6.9	7.2	7.2	7.2
Avg. class length (min.)	47.6	46.1	47.3	49.1
Avg. daily attend. (%)	91.7	95.7	94.0	94.3

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Pupil/Teacher Ratios

The percentage of public schools with pupil/teacher ratios of less than 16:1, 46.9 percent, was much higher than that of Catholic schools, 7.8 percent, and other religious schools, 26.7 percent (table 3.5). Although the percentage of private, nonreligious schools with pupil/teacher ratios of less than 16:1, 71.9 percent, was much higher than that of public schools, 46.9 percent, this difference was not statistically significant. In contrast, 38.0 percent of Catholic schools had pupil/teacher ratios greater than 25:1, compared with only 3.3 percent of public schools, and 18.5 percent of other religious schools. The average pupil/teacher ratio was 16.4 in public schools, 22.9 in Catholic schools, 19.0 in other religious schools, and 15.2 in private, nonreligious schools (table 3.5, figure 3.1).

Table 3.5--Percentage of schools attended by eighth graders, by institutional type, by pupil/teacher ratio: 1988

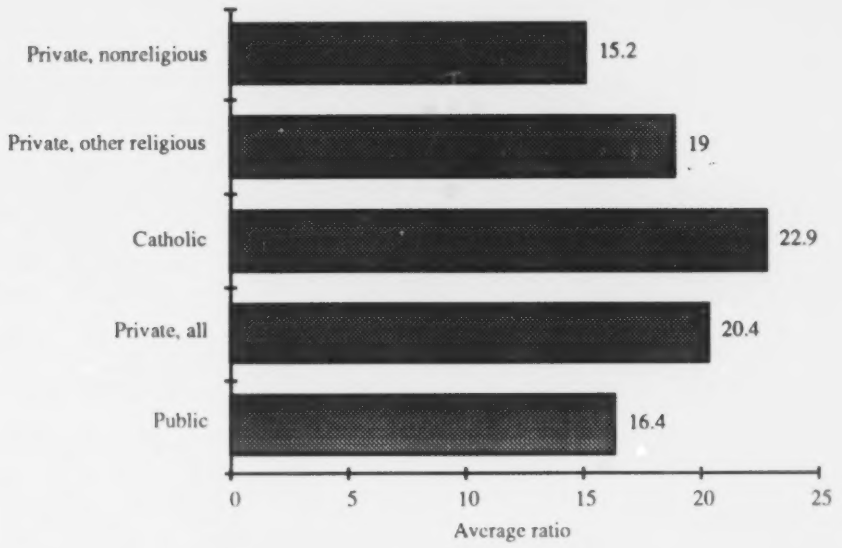
Pupil/teacher ratio	Public	Private			
		All schools	Catholic	Other religious	Non-religious
<16	46.9	22.4	7.8	26.7	71.9
16 to 20	37.9	27.8	23.6	35.4	7.6
21 to 25	11.9	23.3	30.5	19.3	9.0
>25	3.3	26.5	38.0	18.5	11.6
Total	100.0	100.0	100.0	100.0	100.0
Average ratio	16.4	20.4	22.9	19.0	15.2

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

To some extent, the low pupil/teacher ratios for public schools reflect the fact that a much higher percentage of public schools than private schools were small and were located in rural areas. For example, although 35.8 percent of urban public schools had pupil/teacher ratios of less than 16:1, 54.9 percent of rural public schools had such low ratios (table 3.6). Nevertheless, only 1.1 percent of urban Catholic schools had pupil/teacher ratios of less than 16:1. Similarly, while 35.5 percent of urban Catholic schools had pupil/teacher ratios greater than 25:1, only 3.7 percent of urban public schools had ratios of this magnitude. Pupil/teacher ratios averaged 17.2 in urban public schools, 23.3 in urban Catholic schools, 17.0 in suburban public schools, and 15.7 in rural public schools.

Figure 3.1--Average pupil/teacher ratio in schools attended by eighth graders, by institutional type: 1988



SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table 3.6--Percentage of schools attended by eighth graders, by urbanicity, by pupil/teacher ratio: 1988

Pupil/teacher ratios	Urban		Suburban	Rural
	Public	Catholic	Public	Public
<16	35.8	1.1	39.0	54.9
16 to 20	42.7	25.4	41.4	34.5
21 to 25	17.9	38.1	15.6	7.9
>25	3.7	35.5	4.1	2.8
Total	100.0	100.0	100.0	100.0
Average ratio	17.2	23.3	17.0	15.7

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

The size of pupil/teacher ratios increased as size of school increased, especially in the public sector. In public schools, the percentage of schools with student/teacher ratios of less than 16:1 was 66.5 percent of schools with fewer than 250 students, 51.4 percent of schools with 250 to 499 students, 34.7 percent of schools with 500 to 999 students, and 21.5 percent of schools with more than 1,000 students (table 3.7). In public schools, the pupil/teacher ratio increased steadily as school size grew—a ratio of 14.9 in schools with fewer than 250 students, 15.8 in schools with 250 to 499 students, 17.4 in schools with 500 to 999 students, and 18.7 in schools with more than 1,000 students.

Table 3.7--Schools attended by eighth graders, by pupil/teacher ratio, by school size: 1988

School size	Public		Private	
	% with ratio <16:1	Average ratio	% with ratio <16:1	Average ratio
1 to 249	66.5	14.9	25.8	18.9
250 to 499	51.4	15.8	12.2	23.5
500 to 999	34.7	17.4	32.1	19.8
1000+	21.5	18.7	Low-N	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

In private schools, the relationship between size and pupil/teacher ratios was less apparent. Although the percentage of schools with ratios of 16:1 appeared to decline from 25.8 percent in schools with fewer than 250 students to 12.2 percent in schools with 250 to 499 students, this difference was not statistically significant (table 3.7). Moreover, there was no significant difference between private schools with fewer than 250 students and those with 500 to 999 students. The average pupil/teacher ratio of private schools with 250 to 499 students, 23.5, was significantly higher than the ratio of schools with fewer than 250 students, 18.9; however, there was no significant difference between the ratio of schools with 500 to 999 students and schools with fewer than 250.

In public schools, pupil/teacher ratios were lowest in all-white schools. In public schools with no minority students, the pupil/teacher ratio averaged 14.5, increasing to 16.8 in schools with some but less than 6 percent minorities, 17.1 in schools with 6 percent to 20 percent minorities, 16.7 in schools with 21 percent to 60 percent minorities, and 17.2 in schools with more than 60 percent minorities (table 3.8). This relationship between pupil/teacher ratio and percentage minority may result simply from school size. In fact, schools with higher percentages of minority students were more often found in urban areas where schools were large. All-white schools may have been mainly rural, where small school size necessitated lower pupil/teacher ratios.

Table 3.8--Public schools attended by eighth graders, by pupil/teacher ratio, by percentage of minorities enrolled: 1988

Percent minorities	Pupil/teacher ratio
None	14.5
< 6%	16.8
6% to 20%	17.1
21% to 60%	16.7
> 60%	17.2

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Racial–Ethnic Characteristics of the Faculty

In public schools serving eighth graders, white teachers on the average made up 88.4 percent of the faculty, compared with 93.5 percent in private schools (table 3.9). Although private, nonreligious schools appeared to have had the highest percentage of white teachers, 96.1 percent, the differences between this percentage and those in Catholic and private, other religious schools were not statistically significant. Black teachers made up 8.3 percent of the teaching force in public schools, a significantly higher percentage than in Catholic schools, 3.3 percent, and in private, nonreligious schools, 2.7 percent. Hispanic teachers represented 2.0 percent of the faculty in public schools, 2.1 percent in Catholic schools, 2.7 percent in other religious schools, and 0.6 percent in private, nonreligious schools. Asian teachers were about 1 percent or less of the teaching force in all types of schools.

Table 3.9--Schools attended by eighth graders, by institutional type, by racial–ethnic characteristics of the faculty: 1988

Race–ethnicity of faculty	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Avg. % Asian	0.7	0.4	0.6	0.2	0.5
Avg. % Hispanic	2.0	2.3	2.1	2.7	0.6
Avg. % black	8.3	3.7	3.3	4.3	2.7
Avg. % Native American	0.6	0.2	0.4	0.1	0.0
Avg. % white	88.4	93.5	93.6	92.8	96.1
Total	100.0	100.0	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Graduate Education of the Faculty

The percentage of teachers with graduate degrees was higher in public schools (44.0 percent) than in Catholic schools (24.3 percent) and other religious schools (30.5 percent) (table 3.10). Private, nonreligious schools had a higher percentage of teachers with graduate degrees, 57.5 percent, than Catholic schools and other religious schools. While the average percentage of faculty with graduate degrees appears to have been higher in private, nonreligious schools than in public schools, this difference was not statistically significant. In public schools, the percentage of the faculty with a graduate degree was much higher in urban areas, 52.5 percent, than in rural areas, 37.6 percent (table 3.11).

Table 3.10--Percentage of faculty with graduate degrees in schools attended by eighth graders, by institutional type: 1988

Graduate education	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Avg. % with grad. deg.	44.0	30.2	24.3	30.5	57.5

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table 3.11--Percentage of faculty with graduate degrees in public schools attended by eighth graders, by urbanicity: 1988

Graduate education	Avg. % with graduate degree
Urban	52.5
Suburban	50.8
Rural	37.6

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Student Perceptions of Teacher Quality

In NELS:88 eighth graders were asked questions about teachers in their schools, and the responses were used to construct a composite indicator of students' assessments of teacher quality.[5] Students with high scores on this variable were those who agreed strongly with such statements as "Students get along well with teachers;" "The teaching is good;" "Teachers are interested in students;" and "Most of my teachers listen to what I say." They also strongly disagreed with the statement "In class I often feel 'put down' by my teachers."

Eighth graders in public schools generally gave their teachers lower quality ratings than their peers in private schools. On a score ranging from "1" to "4," the average teacher quality rating was 2.7 in public schools, 2.8 in Catholic schools, 2.9 in other religious schools, and 2.9 in private, nonreligious schools (table 3.12). In public schools, 10.8 percent of the eighth graders gave their teachers a high rating, compared with 30.6 percent

[5]For an explanation of the construction of this composite measure of teacher quality, see Appendix A.

in Catholic schools, 60.0 percent in other religious schools, and 54.1 percent in private, nonreligious schools.

Table 3.12--Student perceptions of teacher quality in schools attended by eighth graders, by institutional type: 1988

Student perceptions	Public	Private			
		All schools	Catholic	Other religious	Non-religious
% low teacher rating	31.6	13.5	19.4	10.1	2.6
% medium teacher rating	57.6	39.9	50.0	29.9	43.4
% high teacher rating	10.8	46.6	30.6	60.0	54.1
Total	100.0	100.0	100.0	100.0	100.0
Avg. teacher rating	2.7	2.8	2.8	2.9	2.9

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

In summary, the learning environments of public and private schools varied considerably. On the average, public and Catholic schools operated more days per year than did other religious or private, nonreligious schools. In public schools, the school day was longer than in Catholic schools but shorter than the day in other religious or private, nonreligious schools. The average pupil/teacher ratio was much higher in Catholic schools than it was in public schools or other private schools. The percentage of minority faculty was about twice as great in public schools than in private schools, with private, nonreligious schools employing the fewest minority teachers. However, in all types of schools, the percentage of minority faculty on average was lower than that of minorities in the population at large. The percentage of teachers with graduate degrees was much higher in public schools than it was in Catholic or other religious schools, although private, nonreligious schools appear to have had the highest percentage of teachers with graduate degrees. In other religious and private, nonreligious schools, about five times as many students rated their teachers highly than did students in public schools, and almost three times as many students in Catholic schools than in public schools gave their teachers high marks.

4. School Policies and Programs

NELS:88 provides an interesting snapshot of policies and programs in schools serving eighth graders. This section describes curriculum requirements, extracurricular activities, the availability of special instruction and counseling, admissions procedures, and other policies.

Curriculum Requirements

Virtually all schools required eighth graders to take a full year of math and reading, and almost all required a full year of science and history as well (table 4.1). Higher percentages of Catholic and private, nonreligious schools required a full year of science and history than did public schools. Nevertheless, more than 90 percent of public schools required a full year in these subjects.

Table 4.1--Percentage of schools attended by eighth graders, by institutional type, by curriculum requirements: 1988

Student perceptions	Public	Private			
		All schools	Catholic	Other religious	Non-religious
One year math required	98.4	100.0	100.0	100.0	100.0
One year reading required	100.0	100.0	100.0	100.0	100.0
One year science required	93.1	94.0	99.6	87.8	99.3
One year history required	94.8	93.1	99.5	86.1	99.1
Computer education required	15.7	37.2	49.9	23.4	40.5
Foreign language required	14.0	19.4	14.5	16.1	60.0
Art required	28.7	57.4	74.2	44.7	41.9
Music required	33.7	61.8	70.1	57.5	41.2
Physical education required	86.0	87.9	90.7	83.2	99.2
Family/sex education required	11.8	17.3	29.0	5.6	20.4
Ethics required	2.3	44.4	56.4	38.4	15.7
Religion required	0.5	89.6	100.0	94.2	13.4

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Requirements in other subjects varied greatly. Computer education was required in 15.7 percent of the public schools, 49.9 percent of the Catholic schools, 23.4 percent of the other religious schools, and 40.5 percent of the private, nonreligious schools. Foreign language was required in about 15 percent of public, Catholic, and other religious schools, versus 60.0 percent of private, nonreligious schools. Sex education was required in 29.0 percent of Catholic schools, 20.4 percent of private, nonreligious schools, 11.8 percent of

public schools, and 5.6 percent of other religious schools. Only 2.3 percent of the public schools required ethics, but this subject was required in 56.4 percent of the Catholic schools and 38.4 percent of other religious schools. All Catholic schools and 94.2 percent of the other religious schools required students to take religion courses, compared with 13.4 percent of the private, nonreligious schools and 0.5 percent of the public schools.

In the public schools, school size appeared to affect some course requirements. For example, only 4.0 percent of schools with fewer than 250 students required a foreign language, while 22.7 percent of those with more than 1,000 students did so (table 4.2). Similarly, 79.3 percent of the schools with fewer than 250 students required physical education, versus 93.4 percent of schools with more than 1,000 students, but this difference was not statistically significant. In other subjects, school size did not appear to be related to course requirements. For example, 16.0 percent of schools with fewer than 250 students required computer education, compared with 14.3 percent of schools with more than 1,000 students. Differences in the percentages of schools requiring art and music were also insignificant among schools of various sizes.

Table 4.2--Percentage of public schools attended by eighth graders, by size of school, by curriculum requirements: 1988

	School size			
Requirements	1 to 249	250 to 499	500 to 999	1,000+
One year math required	97.1	97.5	99.8	100.0
One year reading required	97.1	100.0	99.9	100.0
One year science required	89.5	96.5	92.4	91.2
One year history required	94.3	93.4	96.1	97.6
Computer education required	16.0	12.4	18.9	14.3
Foreign language required	4.0	16.7	16.1	22.7
Art required	27.3	29.7	27.7	33.8
Music required	34.1	40.8	27.2	29.5
Physical education required	79.3	89.0	86.0	93.4
Family/sex education required	12.5	10.6	12.4	12.5
Ethics required	3.4	1.4	2.7	1.1
Religion required	0.0	0.0	1.5	0.0

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Extracurricular Offerings

Generally, public schools were more likely to offer eighth graders extracurricular activities than were private schools. For example, 92.4 percent of public schools offered fine arts, versus 79.5 percent of private schools (table 4.3). Public schools were also more likely to provide academic clubs, student council, sports and cheerleading, and vocational

clubs. The only extracurricular activities provided more often by private schools were religious clubs in the Catholic and other religious schools.

It appears that these differences in offerings between public and private schools may have been heavily influenced by the private, other religious schools. With the exception of religious clubs and vocational clubs, other religious schools consistently provided lower percentages of extracurricular activities than did Catholic or private, nonreligious schools. These differences, however, were not always statistically significant. Given that the other religious schools tended to be smaller than the other types of private schools, the differences in the percentages of schools providing extracurricular activities may have been largely a function of size rather than any philosophical differences about the desirability of these activities. Indeed, differences in school size may account generally for the differences between public and private schools in extracurricular offerings.

Table 4.3--Percentage of schools attended by eighth graders, by institutional type, by extracurricular offerings: 1988

Type of activity	Public	Private			
		All schools	Catholic	Other religious	Non-religious
% with fine arts	92.4	79.5	88.3	71.3	78.9
% with academic clubs	78.6	60.8	69.3	52.4	63.1
% with student council	79.2	46.3	49.7	36.9	80.1
% with paper/yearbook	71.6	63.6	71.8	52.4	82.0
% with sports/cheerleading	97.5	83.2	91.9	72.4	98.0
% with service clubs	40.9	36.3	47.3	23.5	48.7
% with religious clubs	6.1	59.3	61.7	65.9	12.6
% with vocational clubs	18.0	3.6	2.7	5.1	0.2

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

The figures in table 4.4 suggest that size does have a major influence on schools' provision of extracurricular offerings. With the exception of religious clubs and vocational clubs in private schools, the percentage of schools providing a particular extracurricular activity increased as the size of the school grew—a relationship that was equally true for both public and private schools. For example, 77.1 percent of public schools with fewer than 250 students provided fine arts, compared with more than 97.9 percent of public schools with 500 to 999 students (table 4.4). Among the smallest public schools, 64.8 percent had a school paper or yearbook, versus 88.9 percent of the public schools with more than 1,000 students. Larger schools were also much more likely to have academic clubs and student councils. In short, economies of scale appear to be strongly associated with providing extracurricular activities.[6] Similarly, private schools with 500 to 999

[6]Extracurricular activities were also more likely to be available in public schools when students attended a middle school rather than an elementary or high school, and the percentage of schools offering extracurricular activities increased as the size of the eighth grade class grew. Sorting out the independent effects of school size, grade size, and grade span would require multivariate analysis.

students were more likely than private schools with fewer than 250 students to offer fine arts, academic clubs, student council, and service clubs.

Table 4.4--Percentage of schools attended by eighth graders, by size of school, by extracurricular offerings: 1988

Type of Activity	Public				Private			
	1 to 249	250 to 499	500 to 999	1,000+	1 to 249	250 to 499	500 to 999	1,000+
% with fine arts	77.1	95.5	97.9	99.7	75.8	80.0	97.8	Low-N*
% with acad. clubs	67.3	74.9	86.0	97.0	51.3	72.2	79.6	Low-N
% with student council	52.7	81.4	92.1	89.7	33.8	61.0	72.9	Low-N
% with paper/yearbook	64.8	62.6	81.5	88.9	59.1	65.0	84.1	Low-N
% with sports/cheerlead.	94.0	99.6	97.4	99.1	80.8	85.0	91.2	Low-N
% with service clubs	15.8	40.4	53.1	63.6	27.6	45.0	58.8	Low-N
% with religious clubs	7.6	5.5	5.7	7.2	59.4	60.5	55.0	Low-N
% with voced. clubs	11.2	15.4	23.3	27.2	5.3	0.0	4.8	Low-N

*Fewer than 30 schools.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Special Instructional Programs and Counseling

The schools serving eighth graders varied greatly in the kinds of special instructional programs they offered. For example, public schools were much more likely to offer students gifted and talented programs (GATE) than were private schools. While about two-thirds of public schools provided some kind of GATE program, only 20.2 percent of Catholic schools, 12.7 percent of other religious schools, and 13.3 percent of private, nonreligious schools offered them (table 4.5). GATE programs were much more likely to be found in larger schools, both public and private, possibly suggesting that smaller schools were less likely to provide such programs because their enrollments were not large enough to justify the additional cost (table 4.6).

Table 4.5--Percentage of schools attended by eighth graders, by institutional type, by type of gifted and talented (GATE) programs: 1988

Type of program	Public	Private			
		All schools	Catholic	Other religious	Non-religious
No GATE program	34.6	83.1	79.8	87.3	76.7
Some GATE program	65.4	16.9	20.2	12.7	13.3
Outside supplemental GATE	25.0	6.7	11.6	3.4	0.0
GATE grouped together	11.8	1.3	0.7	0.0	11.1
GATE enrichment only	11.8	6.4	7.3	5.9	5.1
GATE inside supplemental	7.3	1.8	0.3	3.3	0.7
Other GATE	9.5	0.7	0.3	0.0	6.4

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table 4.6--Percentage of schools attended by eighth graders with no gifted and talented (GATE) programs, by institutional type, by size of school: 1988

Size of school	Public	Private
1 to 249	44.2	87.5
250 to 499	38.6	79.3
500 to 999	26.7	69.7
1000+	23.5	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Higher percentages of students in public schools were enrolled in special programs than in private schools. Public schools had significantly higher percentages of students than private schools enrolled in English as a Second Language (1.1 percent versus 0.1 percent) special education (7.3 percent versus 1.4 percent), GATE (5.9 percent versus 2.4 percent), job training (0.8 percent versus 0.1 percent), remedial math (7.2 percent versus 3.5 percent), and remedial English (10.4 percent versus 4.6 percent), as shown in table 4.7.

Table 4.7--Schools attended by eighth graders, by institutional type, by percentage of students enrolled in special programs: 1988

Type of program	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Bilingual education	1.2	1.6	0.1	3.2	0.6
ESL	1.1	0.1	0.2	0.1	0.2
Special education	7.3	1.4	0.1	0.7	12.0
GATE	5.9	2.4	1.4	1.7	10.3
Job training	0.8	0.1	0.0	0.0	1.6
Remedial math	7.2	3.5	3.8	1.4	12.2
Remedial English	10.4	4.6	5.7	1.8	13.2

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

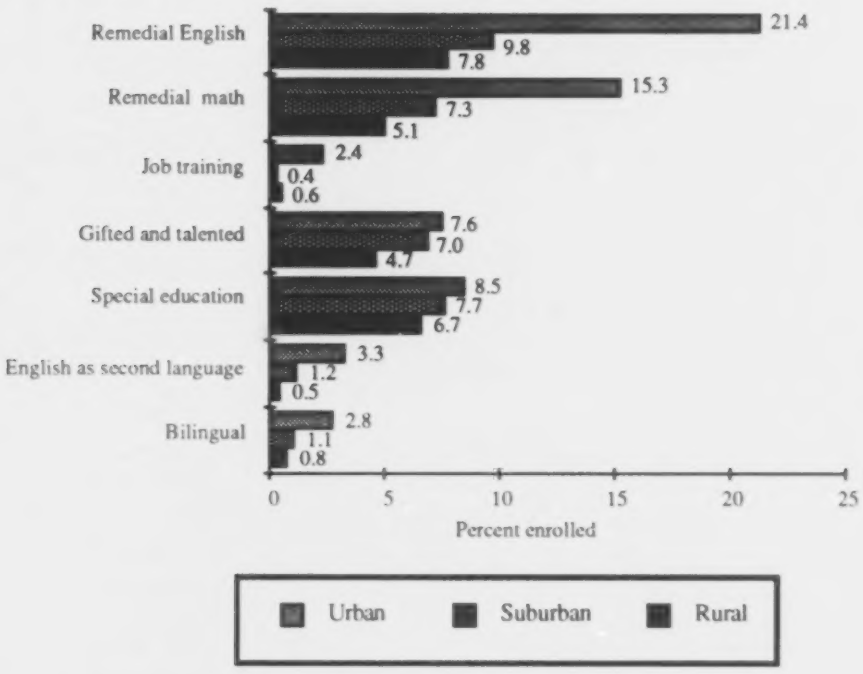
Among public schools, the percentages of students enrolled in several special programs were higher in urban schools than in rural or suburban schools. In urban public schools, 2.8 percent of students were enrolled in bilingual education versus 0.8 percent of students in rural schools; 3.3 percent of urban students were enrolled in ESL versus 0.5 percent of rural students (table 4.8). The percentage of students in urban schools enrolled in remedial math and English was more than twice as great as the percentage in suburban schools and about three times as great as that in rural schools (figure 4.1).

Table 4.8--Public schools attended by eighth graders in 1988, by urbanicity, by percentage of students enrolled in special programs: 1988

Type of program	Urban	Suburban	Rural
Bilingual education	2.8	1.1	0.8
ESL	3.3	1.2	0.5
Special education	8.5	7.7	6.7
GATE	7.6	7.0	4.7
Job training	2.4	0.4	0.6
Remedial math	15.3	7.3	5.1
Remedial English	21.4	9.8	7.8

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Figure 4.1--Public schools attended by eighth graders, by urbanicity, by percentage of students enrolled in special programs: 1988



SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Independent counseling appeared to figure more prominently in public schools than in Catholic schools. That is, 39.4 percent of administrators of public schools reported that counselors had "a lot" of influence over student assignments to high school classes, compared with only 16.8 percent of Catholic schools (table 4.9). At the other extreme, 40.7 percent of Catholic schools reported that counselors had no influence on high school class assignments, compared with only 9.5 percent of the public schools. Counselors at private, nonreligious schools also appeared to have more influence on assignments to high school than did counselors in Catholic schools; however, these differences were not statistically significant. Counseling had less influence in the other religious schools than in public schools, and while it also appeared to have less influence in other religious than in private, nonreligious schools, this difference was not statistically significant.

Table 4.9--Percentage of schools attended by eighth graders, by institutional type, by influence of counselors on assignments to high school classes: 1988

Influence of counselor	Public	Private			
		All schools	Catholic	Other religious	Non-religious
A lot	39.4	23.9	16.8	25.4	51.3
Moderate	37.9	26.1	25.6	27.3	22.3
A little	13.2	14.8	16.9	13.6	11.1
None	9.5	35.2	40.7	33.7	15.4
Total	100.0	100.0	100.0	100.0	100.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

The influence of counselors also appeared to increase as school size grew, possibly because small schools were unable to provide independent counseling and relied instead on teachers. Although the difference was not statistically significant, 33.3 percent of the public schools with fewer than 250 students reported that counselors had "a lot" of influence over high school class assignments, versus 46.8 percent of schools with 1,000 students or more (table 4.10).[7] Almost one-fifth of the public schools with fewer than 250 students said counselors had no influence, compared with only 2.2 percent of schools with more than 1,000 students, and this difference was statistically significant. A similar pattern prevailed for private schools.[8]

[7]The difference between schools with fewer than 250 students (33.3 percent) and those with more than 1,000 (46.8 percent) is not statistically significant when schools responded "a lot," but is significant for schools that responded "none."

[8]As with public schools, the difference was not statistically significant for schools responding "a lot," but was statistically significant for schools responding "none."

Table 4.10--Percentage of schools attended by eighth graders, by influence of counselors on assignments to high school classes, by size of school: 1988

Size of school	Public		Private	
	A lot	None	A lot	None
1 to 249	33.3	19.2	18.0	42.4
250 to 499	39.2	9.9	33.2	26.0
500 to 999	42.1	4.3	29.5	22.0
1000+	46.8	2.2	Low-N	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Admissions Procedures and Other Policies

Most private schools used a formal application to determine admission, and most public schools based school assignment on geography. While 82.2 percent of Catholic schools, 85.2 percent of other religious schools, and 100.0 percent of private, nonreligious schools used a formal application to determine admissions, only 9.4 percent of public schools did so (table 4.11). Among the public schools, 27.2 percent did allow transfers to other schools within the district, and 6.1 percent took racial balance into consideration when assigning students to schools.[9]

Table 4.11--Percentage of schools attended by eighth graders, by institutional type, by admissions policies: 1988

Admissions policy	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Formal application	9.4	85.2	82.2	85.2	100.0
Geography	91.1	--	--	--	--
Geography and transfer	27.2	--	--	--	--
Racial balance	6.1	--	--	--	--

-- Not applicable.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

[9]The percentage that took racial balance into consideration may seem low. Recall that there are a large number of rural, one-school districts in the sample, where there are no alternatives. More than 25 percent of the urban public schools took racial balance into consideration in assigning students to schools.

In both public and private schools, the most common reason for retaining students in the eighth grade was failure of a required course. For example, 55.2 percent of public schools, 32.9 percent of Catholic schools, 58.7 percent of other religious schools, and 48.0 percent of private, nonreligious schools indicated that failure of a required course was grounds for retention (table 4.12). Some schools, however, based retention on failure of a specific test in reading, math, science, English, or history. Moreover, public schools were more likely than private schools to use reading and math tests for determining retention. Thus, 18.3 percent of public schools relied on a reading test, compared with 9.5 percent of private schools; 17.1 percent of public schools retained students who failed a math test, versus 9.6 percent of private schools.

More than one-half of all types of private schools and more than three-quarters of public schools reported having a "no pass/no play" policy. These policies require students to maintain a minimum grade-point average in order to participate in school activities such as athletics.

Table 4.12--Percentage of schools attended by eighth graders, by institutional type, by policies on retention and participation in extracurricular activities: 1988

Policy	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Fail reading test	18.3	9.5	13.1	6.5	7.1
Fail math test	17.1	9.6	10.9	8.6	8.6
Fail science test	6.2	5.5	6.1	4.8	5.9
Fail English test	13.3	9.7	11.2	7.8	11.3
Fail history test	6.9	5.4	8.6	2.2	5.9
Fail required course	55.2	46.9	32.9	58.7	48.0
No pass/no play	78.2	51.8	51.0	51.5	56.9

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

In summary, virtually all schools serving eighth graders, whether public or private, required "the basics." One year of math, reading, science, and history was typically a requirement of 85 percent or more of all types of schools in the sample. Beyond "the basics," however, private schools tended to exert greater demands, especially for computer education, foreign languages, art, music, family-sex education, ethics, and religion. There were, nevertheless, significant differences in requirements among different types of private schools. For instance, foreign language was a requirement in about 60 percent of the private, nonreligious schools, compared with about 15 percent of the Catholic and other religious schools. With a few exceptions, public schools offered more extracurricular activities than private schools, although again significant differences were present among types of private schools. School size was strongly associated with the provision of extracurricular activities in both public and private schools; as size increased, the percentage

of schools offering a particular activity grew. Moreover, size appeared to be associated with the provision of special instructional programs and counseling in both public and private schools. With respect to school admissions policies, geography dominated in public schools, while all types of private schools required formal applications. Both public and private schools tended to rely primarily on failure of a required course as the basis for retention versus promotion, although at least 10 percent of the public and Catholic schools relied on test scores in reading, math, or English. About one-half of the private schools and about three-quarters of public schools had "no pass/no play" policies.

5. School Climate

School administrators reported a number of observations about the general climate in schools serving eighth graders. This section describes administrators' assessments of the level of teacher engagement, student behavior, emphasis on academics, degree of restrictiveness by the school, and emphasis on student discipline.

Teacher Engagement

Administrators in private schools reported much higher levels of teacher engagement—good rapport between teachers and administrators, high teacher morale, and positive attitudes about students. Overall 50.4 percent of private school administrators reported a high level of teacher engagement, versus 15.2 percent of public school administrators. Engagement appeared to be highest in Catholic schools, where administrators in 58.8 percent of the schools reported high levels; 44.6 percent of the other religious schools and 40.1 percent of the private, nonreligious schools reported high levels (table 5.1). A scale was constructed to summarize the responses to the various questions on teacher engagement.[10] The average score of 4.0 in public schools was significantly lower than scores of 4.5 in Catholic schools and 4.4 in other religious schools. The public school score also appeared to be lower than the score of 4.3 in private, nonreligious schools, but this difference was not statistically significant.

Table 5.1--Percentage of schools attended by eighth graders, by institutional type, by level of teacher engagement: 1988

Level of engagement	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Low	32.6	12.4	11.1	11.8	22.2
Medium	52.3	37.2	30.2	43.7	37.7
High	15.2	50.4	58.8	44.6	40.1
Total	100.0	100.0	100.0	100.0	100.0
Average score	4.0	4.5	4.5	4.4	4.3

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

[10]For explanation of the construction of this and subsequent scales in this section, see Appendix A.

The level of teacher engagement appeared to decline as the size of school increased. In public schools with fewer than 250 students, 22.3 percent of administrators reported a high level of teacher engagement, compared with 8.6 percent of schools with enrollments of 1,000 or more; however, this difference was not statistically significant (table 5.2). If the difference is real, how much of it is strictly a function of size is unclear, because many of the larger schools were also urban, where working conditions were often difficult. In urban public schools attended by eighth graders, only 6.9 percent of the administrators reported a high level of teacher engagement, compared with 13.0 percent in suburban schools, but this difference was not statistically significant (table 5.3). However, the difference between the level of teacher engagement in urban schools, 6.9 percent, and rural schools, 18.7 percent, was significant. Multivariate analysis of the independent effects of size would, therefore, be useful.

Table 5.2--Percentage of schools attended by eighth graders, by level of teacher engagement, by size of school: 1988

	Public				Private			
Size of school	Low	Medium	High	Average score	Low	Medium	High	Average score
1 to 249	30.0	47.7	22.3	4.1	10.9	35.6	53.5	4.5
250 to 499	33.8	50.9	15.3	4.0	15.8	36.3	47.9	4.4
500 to 999	31.9	56.5	11.7	4.0	11.1	49.2	39.8	4.4
1000+	38.6	52.8	8.6	3.9	Low-N	Low-N	Low-N	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table 5.3--Percentage of public schools attended by eighth graders, by urbanicity, by level of teacher engagement: 1988

Level of engagement	Urban	Suburban	Rural
Low	33.7	34.1	31.3
Medium	59.4	52.9	49.9
High	6.9	13.0	18.7
Total	100.0	100.0	100.0
Average score	3.9	4.0	4.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Student Behavior

Administrators were also asked several questions about student behavior, and a scale was constructed to indicate the level of good behavior in schools attended by eighth graders. This scale combined the responses of administrators to questions about tardiness, absenteeism, fighting, vandalism, drug use, and physical and verbal abuse. The higher the score, the better student behavior. By a wide margin, Catholic and other religious schools had the highest scores. In Catholic schools, 44.9 percent of the administrators reported high levels of good behavior by students, as did 58.0 percent of administrators in other religious schools (table 5.4). These percentages were significantly higher than the percentage of public school administrators reporting high levels of good behavior, 10.3 percent. The Catholic and other religious school percentages were also higher than those of private, nonreligious schools, but the difference between Catholic and private, nonreligious schools was not statistically significant. The average score of 3.3 in public schools was significantly lower than scores of 3.8 in Catholic schools, 3.8 in other religious schools, and 3.6 in private, nonreligious schools.

Table 5.4--Percentage of schools attended by eighth graders, by institutional type, by level of good behavior: 1988

Level of good behavior	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Low	28.6	2.4	0.0	2.6	13.7
Medium	61.1	48.8	55.1	39.5	66.9
High	10.3	48.8	44.9	58.0	19.4
Total	100.0	100.0	100.0	100.0	100.0
Average score	3.3	3.8	3.8	3.8	3.6

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Among public schools, behavior problems were most severe in urban areas. In particular, 53.0 percent of the urban public schools reported low levels of student behavior, compared with 26.8 percent of suburban schools and 23.2 percent of rural schools (table 5.5). Interestingly, none of the urban Catholic schools reported low levels of student behavior, and 40.5 percent of the urban Catholic schools said behavior was high. Only 0.6 percent of the urban public schools reported a high level of student behavior.

Table 5.5--Percentage of schools attended by eighth graders, by urbanicity, by level of good behavior: 1988

Level of good behavior	Urban		Suburban	Rural
	Public	Catholic	Public	Public
Low	53.0	0.0	26.8	23.2
Medium	46.3	59.5	65.4	62.3
High	0.6	40.5	7.8	14.5
Total	100.0	100.0	100.0	100.0
Average score	3.1	3.8	3.3	3.4

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Emphasis on Academics

Administrators were also asked to assess their school's emphasis on academics—the priority placed on learning, the extent to which teachers encouraged students to do their best, expectations about homework, and the degree of competition among students for grades. A scale was constructed to summarize the responses to these questions, with a high score reflecting strong emphasis on academics. The average score of 4.0 in public schools was lower than the score of 4.2 for private schools (table 5.6). While 23.9 percent of public school administrators reported a high level of emphasis on academics, 39.1 percent of private school administrators did so. Although greater percentages of administrators in all three types of private schools reported a higher level of emphasis on academics than did public school administrators, none of these differences were statistically significant.

Table 5.6--Percentage of schools attended by eighth graders, by institutional type, by level of emphasis on academics: 1988

Level of emphasis	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Low	25.2	11.4	5.2	15.2	21.6
Medium	50.9	49.5	57.7	44.6	35.4
High	23.9	39.1	37.1	40.2	43.0
Total	100.0	100.0	100.0	100.0	100.0
Average score	4.0	4.2	4.3	4.2	4.0

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Extent of Unrestricted Behavior

In NELS:88 administrators were also asked to describe the extent to which their schools restricted the actions of students and visitors—that is, were visitors required to register, were hall passes required, were certain forms of dress prohibited, and were students required to remain on school grounds during lunch hours. A scale was constructed to combine the answers to these questions, with higher scores indicating fewer restrictions. By a large margin, private schools of all types were much more restrictive than public schools. For example, 60.3 percent of Catholic, 64.4 percent of other religious schools, and 51.3 percent of private, nonreligious schools had low scores, compared with 19.1 percent of public schools (table 5.7). In contrast, 51.1 percent of public schools had high scores, indicating very unrestricted environments.

Table 5.7--Percentage of schools attended by eighth graders, by institutional type, by degree of unrestrictiveness: 1988

Degree of unrestrictiveness	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Low	19.1	61.4	60.3	64.4	51.3
Medium	29.7	28.9	34.5	22.6	35.0
High	51.1	9.7	5.2	13.0	13.8
Total	100.0	100.0	100.0	100.0	100.0
Average score	0.8	0.5	0.5	0.5	0.6

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Among public schools, only 3.9 percent of the urban schools had low scores, that is, the most restrictive environment, compared with 29.0 percent of rural schools (table 5.8). Urban schools also appeared to be less restrictive than suburban schools, although the difference was not statistically significant. Urban public schools were substantially less restrictive than urban Catholic schools.

Table 5.8--Percentage of schools attended by eighth graders, by degree of unrestrictiveness and urbanicity: 1988

Degree of unrestrictiveness	Urban		Suburban	Rural
	Public	Catholic	Public	Public
Low	3.9	60.4	10.0	29.0
Medium	16.0	31.8	29.3	33.6
High	80.1	7.8	60.7	37.4
Total	100.0	100.0	100.0	100.0
Average score	1.0	0.5	0.9	0.7

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Unrestrictiveness also tended to increase as school size increased. Among public schools, 45.0 percent of the schools with fewer than 250 students had low scores, indicating the most restrictions, compared with only 0.5 percent of schools with 1,000 students or more (table 5.9). The trend was not as strong among private schools, but as with public schools, unrestrictiveness tended to increase as size increased. About 69 percent of the private schools with fewer than 250 students had low scores, compared with 50.4 percent of schools with 250 to 499 students and 52.8 percent of schools with 500 to 999 students; however, these differences were not statistically significant. Here again, multivariate analysis of the independent effects of school size, controlling for such other factors as urbanicity, would be instructive.

Table 5.9--Percentage of schools attended by eighth graders, by degree of unrestrictiveness, by size of school: 1988

Size of school	Public				Private			
	Low	Medium	High	Average score	Low	Medium	High	Average score
1 to 249	45.0	25.5	29.5	0.6	68.8	24.4	6.81	0.47
250 to 499	19.4	38.6	42.0	0.8	50.4	35.7	13.96	0.57
500 to 999	5.7	26.0	68.3	0.9	52.8	34.0	13.16	0.57
1000+	0.5	18.2	81.5	1.0	Low-N	Low-N	Low-N	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Level of Student Discipline

Finally, administrators were asked to evaluate how much emphasis was placed in their schools on student discipline—the extent to which their schools provided a structured classroom environment and school day, had high expectations about homework, and tolerated deviation from school rules. A scale similar to those discussed previously combined the answers to these questions, with a higher score indicating a more structured, disciplined environment.

Overall, there was a higher level of discipline in private schools than in public schools, but this difference was attributable mainly to the influence of the Catholic and other religious schools. Religious schools were more structured and disciplined than public schools. Catholic schools had an average score of 4.7 on the combined scale, and other religious schools averaged 4.6; public schools averaged 4.4 (table 5.10). Although private, nonreligious schools had a lower average score, 4.3, than Catholic and other religious schools, these differences were not statistically significant. There was no statistical difference in these scores between public schools and private, nonreligious schools.

Table 5.10--Percentage of schools attended by eighth graders, by institutional type, by level of discipline: 1988

Level of discipline	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Low	26.4	11.6	8.7	11.9	24.1
Medium	55.1	53.4	59.8	51.7	30.2
High	18.5	35.1	31.5	36.4	45.7
Total	100.0	100.0	100.0	100.0	100.0
Average score	4.4	4.6	4.7	4.6	4.3

NOTE: Totals may not add to 100 percent because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

6. Conclusion

The data from NELS:88 underscore an apparent fact: in 1988, American eighth graders attended a variety of different types of schools. For most observers of American education, this fact is not news. Nevertheless, the data from NELS:88 provide an important reminder of the diverse conditions under which American children learn. The data also highlight some important underlying characteristics that are easily forgotten amidst the stereotypes that have grown up around American schools.

Private schools attended by eighth graders were indeed different from public schools. Generally, in the private sector, schools were smaller, student achievement was higher, aspirations for higher education were greater, the curriculum was richer, the faculty were more engaged, and there were fewer problems with student behavior. In general, public schools served much higher proportions of minority students, those with limited English proficiency, and those from single-parent families. Public schools also were almost exclusively responsible for serving students in rural America and for coping with the difficulties of providing rich educational offerings in sparsely populated areas.

On some important measures, however, the differences between public and certain types of private schools became blurred. Private schools were, in fact, a rather heterogeneous lot. Thus, many Catholic schools served proportions of minority students that were about as high as those in many public schools. Pupil/teacher ratios were significantly higher in Catholic schools than in public schools, and Catholic school teachers were less likely to have graduate degrees.[11] Consequently, while Catholic schools may have enjoyed some of the benefits of selectivity typical of other private schools, they nevertheless often educated very different types of students, in larger classes, with teachers having less graduate education than those who taught in other private schools or, for that matter, in many public schools.

Public schools were quite heterogeneous as well, and among the many differences that data from NELS:88 underscore were the contrasts between urban, suburban, and rural public schools. The data from NELS:88 indicate that there are serious problems in many urban middle schools. For instance, in one-third of the urban schools serving eighth graders, more than half of the students enrolled lived in single-parent families. In urban public schools, eighth graders consistently scored much lower than their counterparts in suburban and rural schools on tests of knowledge in reading, math, science, and history. The percentage of students in urban schools enrolled in remedial math and English was more than twice as great as the percentage in suburban schools and about three times as great as that in rural schools. In urban public schools serving eighth graders, the percentage of administrators reporting high teacher engagement was only 6.9 percent, compared with 18.7 percent in rural schools. About half of urban public schools reported significant problems with student behavior, compared with about one-fourth of suburban and rural public schools.

Interestingly, despite these problems, eighth graders in urban public schools displayed not only a certain realism about their situation but also a cautious optimism.

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[11] These are not necessarily new observations; they are consistent with those made by earlier comparisons of public and private high schools and reveal that some of the same patterns exist in schools attended by eighth graders. See, for example, James S. Coleman and Thomas Hoffer, *Public and Private High Schools: The Impact of Communities* (New York: Basic Books, 1987).

Although eighth graders in public schools generally rated the quality of their teachers much lower than did their peers in private schools, the marks students in urban public schools gave teachers differed only slightly from those given by students in suburban public schools. Conditions may have been tough in urban public schools, but urban eighth graders were no more inclined than students in other public schools to cite poor teaching as part of their predicament.

Moreover, the educational aspirations of eighth graders in urban public schools were not much different from those of their counterparts in suburban or rural public schools. Only 2.0 percent of eighth graders in urban public schools actually planned to drop out of high school—a proportion that was not much different from the 1.3 percent of eighth graders in suburban schools or the 1.9 percent in rural schools. There was virtually no difference in the proportion of urban eighth graders aspiring to postsecondary education from that of suburban and rural eighth graders with the same goal. If the past is any indicator of the future, clearly much larger percentages of eighth graders attending urban schools will drop out, and far fewer will pursue or complete some form of postsecondary education. However, if these results are repeated for the eighth graders in the urban schools of NELS:88, these outcomes cannot be attributed to lower student aspirations. Eighth graders in urban public schools appear to have aspired to the same educational goals as eighth graders elsewhere.

While on many measures eighth graders in rural schools appear to have fared better than those in urban schools, the data from NELS:88 raise some concerns that warrant closer scrutiny. In rural areas where sparse populations lead to relatively small school size, it appears that size may have negatively affected the quality of school offerings. For example, in small rural public schools, there were fewer requirements for eighth graders to take a foreign language, and physical education and extracurricular activities were more limited. In addition, counseling appeared to be less available in small schools.

Small schools, however, are not located only in rural areas, and this issue of school size needs closer attention. The results reported here indicate that both public and private schools with fewer than 250 students were less able to provide a rich curriculum, a variety of extracurricular activities, special programs, and counseling. On the other hand, smaller schools also reported higher levels of faculty engagement and fewer problems with student discipline. A thorough analysis of the pros and cons of different sizes of schools, including an assessment of possible relationships to student achievement, could be quite valuable.

In short, the patterns revealed in this report about the schools attended by eighth graders in NELS:88 provoke a number of interesting questions for future research. What can be discovered from NELS:88 about the widely divergent conditions under which eighth graders learned? Do any of these differences significantly affect students' future levels of achievement, staying in high school, choice of high school courses, matriculation at postsecondary institutions, success in the labor market, or a host of other social, educational, and labor market outcomes associated with their future success or failure? These and other questions should stimulate interest in the data generated by NELS:88 for many years to come.

Appendix A

Technical Notes

Estimates in this report were based on the National Education Longitudinal Study of 1988 eighth graders (NELS:88). All data were drawn from the base-year survey, primarily from the administrator survey. A few variables were obtained from the student survey, which are noted below. All estimates for this sample were calculated using ADMWT, restricting the analysis to the 1,035 schools whose administrators participated in the administrator survey. (Students from 1,052 schools were surveyed in the base year of NELS:88.)

For more information on the NELS:88 surveys, interested readers should consult Ingels et al., *National Education Longitudinal Study of 1988 Base Year: Student Component Data File Users' Manual* (Chicago: National Opinion Research Center, 1989).

Variables for the tables in Section 1, General School Characteristics, and in Section 2, Characteristics of Students by Type of School, were selected to describe basic school characteristics, mainly aspects of school structure: sector, urbanicity, school size, size of eighth grade class, grade span, and departmentalization. Each variable was taken directly from the administrator data file.

A composite variable was created as a row variable from the sector and urbanicity variables to facilitate comparison between suburban public and private schools, as well as between urban public and private schools. Due to the small number of schools in the sample, some of the logically possible categories of the sector–urbanicity composite had to be collapsed into more general categories.

In Section 2, all variables were taken from the administrator file except those in tables 2.9, 2.10, 2.11, 2.12, and 2.13. Thus, the estimates of percentages of minority students are the administrators' own estimates of student body characteristics. The variables in table 2.9 are the percentage of students at each school with particular postsecondary plans. These values were calculated from values for BYPSEPLN for students at each school, using the student weights (BYQWT). The variables for table 2.11 are the mean values for students from each school for the percentage in the top third of students at each school in self-concept and locus of control. Variables for tables 2.12 and 2.13 are school means of students' scores on a series of academic tests. (These tests and scales are described in the users' manual referenced above.) These means were calculated using the student weight (BYQWT). It should be noted that the variables in tables 2.9, 2.10, 2.11, 2.12, and 2.13 are based on student responses and therefore represent sample values for each school.

Nearly all of the variables in Section 3, Characteristics of the Learning Environment, are taken from the administrator file. The only exceptions are the variables in table 3.12 for students' rating of teacher quality, which were taken from the student file. First, a scale was created for each student from five items concerning teacher quality (BYS59A, BYS59F, BYS59G, BYS59I, and BYS59J). This scale was calculated by taking the mean value of valid items for each student. Next, the mean rating of teacher quality was calculated for all students at each school, using the student weights (BYQWT). This score provided the variable for mean student rating of teacher quality. The other variables concerning teacher quality were created by taking the schools with average student ratings that were high (in the top quartile), low (in the bottom quartile), or medium (from the 25th to the 75th percentile). The other composite variables created for Section 3 are the faculty ethnicity variables in table 3.9. These variables were created by NORC at MPR's request, since the data to create these percentages were not available in the public release data files. Each variable was created by dividing the number of teachers in a category at the school by the total number of teachers.

All of the variables in Section 4, School Policies and Programs, were taken from the administrator file. Several composites were created for this section. In table 4.5, BYSC40 was used to create the row for no GATE program, when BYSC40 was equal to 2. In addition, many of the columns in Tables 4.3 and 4.4 are also taken from composite variables.

The table below shows how variables in the administrator file were combined to make those for tables 4.3 and 4.4.

Extracurricular activities offered

Source category	Original category	Consolidated
BYSC46A	Acad. honors soc.	Academic clubs
BYSC46D	Computer clubs	
BYSC46G	Math club	
BYSC46H	Science club	
BYSC46I	History club	
BYSC46O	Foreign language clubs	
BYSC46J	Other subject matter clubs	
BYSC46R	Debate/speech	
BYSC46U	Vocational club	Vocational club
BYSC46L	Student council	Student council
BYSC46M	Student newspaper	Newspaper or yearbook
BYSC46N	Student yearbook	
BYSC46Q	Religious organizations	Religious organizations
BYSC46F	Service clubs	Service clubs
BYSC46S	Interscholastic sports	Sports or cheerleading
BYSC46T	Intramural sports	
BYSC46V	Cheerleading, etc.	
BYSC46A-V	(all of these)	Total activities offered

All variables in Section 5, School Climate, were taken from the administrator file. Each row represents the percentage of schools rating high (top quartile), medium (from the 25th to the 75th percentile), or low (bottom quartile) on a scale created by combining responses to several items the school administrators were asked. The table below shows the scales created and the input variables for each. For each scale, a factor and a reliability analysis showed the feasibility of combining the items into a scale. (The alpha statistic for each scale is shown in the table below.)

Composites for school environment

Source	Scale	Alpha statistic
BYSC47E	Teacher engagement	.73
BYSC47G		
BYSC47M		
BYSC47I *		
BYSC47H *		
BYSC47A *		
BYSC47C	Academic press	.71
BYSC47E		
BYSC47F		
BYSC47O		
BYSC49A	Student behavior problems	.88
BYSC49B		
BYSC49C		
BYSC49D		
BYSC49E		
BYSC49F		
BYSC49G		
BYSC49H		
BYSC49I		
BYSC49J		
BYSC49K		
BYSC48A	School control	.75
BYSC48B		
BYSC48C		
BYSC48D		
BYSC48E		
BYSC48J		
BYSC48K		
BYSC47B	Discipline climate	.82
BYSC47D		
BYSC47F		
BYSC47J		
BYSC47K		

* These items were reverse-coded for consistency of scaling.

The NELS:88 sample used a complex, multistage sample design. Students were initially selected within schools grouped within strata. Sampling rates for schools within different strata varied, resulting in better data for policy purposes, but at a cost to statistical efficiency. Hence, simple random sample techniques for estimating standard errors frequently underestimate the true standard errors for some estimates. To overcome this problem,

standard errors for all estimates in this report were calculated using Taylor residual techniques.

To compare estimates for separate subgroups, or to understand the quality of the estimates, standard errors are needed. While the estimates based on 30 or fewer cases were suppressed, the computer automatically produced estimates for subgroups with 31 or more cases. Standard errors and unweighted *N* for all estimates included in this report may be found in Appendix C.

The following table shows where a few key statistics and their standard errors are located.

Table	Row/column	Subgroup	Estimate	Standard error
1.1	1/1	Total	58.8	1.348
1.1	1/3	Private, other rel.	19.5	1.449
1.1	1/4	Nonreligious	3.7	.802
2.1	1/1	Public	25.5	2.823
2.1	1/2	Catholic	33.3	5.119
2.1	1/4	Nonreligious	48.1	11.611
3.1	1/1	Public	5.0	1.404
3.1	1/2	Catholic	13.4	3.572
4.1	1/1	Public	98.4	.943
4.1	1/2	Catholic	100.0	0.000
5.1	1/2	Public	32.6	2.599
5.1	5/1	Average score	4.0	.032

For more information or to obtain more detailed tabulations of estimates and standard errors, contact Ralph Lee, National Center for Education Statistics, Longitudinal Studies Branch, 555 New Jersey Avenue, NW, Washington, DC 20208-5652 (202/357-6777).

This report has been prepared by MPR Associates, Inc. for the Longitudinal Studies Branch, Postsecondary Education Statistics Division, National Center for Education Statistics, Office for Educational Research and Improvement, U.S. Department of Education, under Contract No. RS89170001.

Appendix B

Accuracy of the Estimates and Statistical Procedures

Accuracy of the Estimates

The statistics in this report are estimates derived from a sample. Two broad categories of error occur in such estimates: sampling and nonsampling errors. Sampling errors occur because observations are made only on samples of students, not on entire populations. Nonsampling errors occur not only in surveys of sample groups but also in complete censuses of entire populations.

Nonsampling errors can be attributed to a number of sources: for example, the inability to obtain complete information about all students in all institutions in the sample (some students or institutions refused to participate, or students participated but answered only certain items); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors in collecting, processing, sampling, and estimating missing data.

The accuracy of a survey result is determined by the effect of sampling and nonsampling errors. In surveys with sample sizes as large as those in the NELS:88 study, sampling errors generally are not the primary concern, except where separate estimates are made for relatively small subpopulations such as Asian-Americans or American Indians.

The nonsampling errors are difficult to estimate. The major sources of nonsampling error were nonresponse bias and the reliability of the data. For a complete discussion of these issues, see Phillip Kaufman et al., *Quality of the Responses of Eighth-Grade Students in NELS:88*, Washington, D.C.: National Center for Education Statistics, September 1991.

Statistical Procedures

This report is purely descriptive in nature and does not use any multivariate techniques in the analysis. Researchers are encouraged to conduct a full multivariate analysis of these data and to assess the independent effect of student characteristics and high school course-taking patterns on postsecondary ones.

The descriptive comparisons in this report were based on *Student's t* statistics. Comparisons of statistical significance were based on estimates of the probability of a Type I error, or significance level. The significance levels were determined by calculating the *Student's t* values for the differences between each pair of means, or proportions, and comparing these with published tables of significance levels for two-tailed hypothesis testing.

The NELS:88 sample used a complex, multistage sample design. Students were initially selected from schools grouped within strata. Sampling rates for institutions within different strata varied, resulting in better data for policy purposes, but at a cost to statistical efficiency. Hence, simple random techniques for estimating standard errors frequently underestimate the true standard errors for some estimates. To overcome this problem, standard errors for all estimates in this tabulation were calculated using Taylor residual techniques. All estimates, standard errors, unweighted *N*, and weighted *N* are available from the Longitudinal Studies Branch in comma-separated form for use with all major spreadsheet software and microcomputers.

Standard errors and unweighted *N* are included in the appendix in each descriptive table for interested readers. *Student's t* values may be computed for comparisons using these tables' estimates with the following formula:

$$t = \frac{P_1 - P_2}{\sqrt{se_1^2 + se_2^2}}$$

where P_1 and P_2 are the estimates to be compared, and se_1 and se_2 are their corresponding standard errors.

A hazard in reporting statistical tests for each comparison is that, when making multiple comparisons among categories of an independent variable (for example, different levels of income), the probability of a Type I error for these comparisons taken as a group is larger than that for a single comparison. When more than one difference between groups of related characteristics or "families" are tested for statistical significance, a standard must be applied that assures a level of significance for all of those comparisons taken together.

In order to reduce the probability of Type I error in a set of multiple comparisons, the author of this report calculated Bonferroni intervals based on families of *Student's t* tests. Families of tests were defined as pairwise tests comparing an outcome for two or more related categories of students. For example, a comparison among three types of private schools is a family of tests involving three possible pairs—1) Catholic with other religious schools, 2) Catholic with private, nonreligious schools, and 3) other religious schools with private, nonreligious schools. If, in addition, a comparison is made between public schools and each type of private school, there are six possible pairs.

The width of a Bonferroni interval depends upon the number of comparisons of interest within a family. When only one pairwise comparison is made, the Bonferroni interval is the same as the confidence interval obtained from a *Student's t* test. The more comparisons that are of interest, the narrower the Bonferroni interval and, thus, the greater the *t* statistic needed for each difference to guarantee a significance level $p \leq .05$ for all of the comparisons taken together.[17]

Comparisons were made in this report only when $p \leq .05/k$ for a particular pairwise comparison, where that comparison was one of k tests within a family. This guarantees both that the individual comparison would have $p \leq .05$ and that when k comparisons were made within a family of possible tests, the significance level of the comparisons would sum to $p \leq .05$.[18]

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[17] For a discussion of familywise error rates, see Alan J. Klockars and Gilbert Sax, *Multiple Comparisons* (Beverly Hills, CA: Sage Publications, 1986), 17.

[18] The standard is that $p \leq .05/k$ for each comparison is more stringent than the criterion that the significance level of the comparisons should sum to $p \leq .05$. For tables showing the *t* statistic required to ensure that $p \leq .05/k$ for a particular family size and degrees of freedom, see Oliver Jean Dunn, "Multiple Comparisons Among Means," *Journal of the American Statistical Association* 56: 52-64.

Appendix C

Standard Errors and Unweighted Ns

Table C1.1--Schools attended by eighth graders, by institutional type: 1988

	Public	Private			
		All schools	Catholic	Other religious	Non-religious
s.e.	1.348	1.348	0.862	1.449	0.802
unwtd. n	1035	1035	1035	1035	1035

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C1.2--Schools attended by eighth graders, by institutional type, by school size: 1988

School size	Public	Private			
		All schools	Catholic	Other religious	Non-religious
1 to 249					
s.e.	3.001	3.785	5.637	5.305	12.924
unwtd. n	802	233	105	68	60
250 to 499					
s.e.	2.572	3.478	5.450	4.763	11.362
unwtd. n	802	233	105	68	60
500 to 999					
s.e.	2.201	1.727	2.140	2.608	8.843
unwtd. n	802	233	105	68	60
1,000+					
s.e.	0.723	0.095	0.169	0.030	0.681
unwtd. n	802	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C1.3--Public schools attended by eighth graders, by urbanicity, by school size: 1988

School size	Urban	Suburban	Rural
1 to 249			
s.e.	2.137	4.243	4.624
unwtd. n	202	328	272
250 to 499			
s.e.	4.355	3.918	4.098
unwtd. n	202	328	272
500 to 999			
s.e.	4.583	3.735	2.872
unwtd. n	202	328	272
1,000+			
s.e.	3.034	1.361	0.599
unwtd. n	202	328	272

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C1.4--Schools attended by eighth graders, by institutional type, by size of eighth grade: 1988

Size of eighth grade	Public	Private			
		All schools	Catholic	Other religious	Non-religious
1 to 20					
s.e.	2.907	3.732	5.783	4.633	12.722
unwtd. n	802	233	105	68	60
21 to 30					
s.e.	1.602	3.098	5.385	3.639	8.881
unwtd. n	802	233	105	68	60
31 to 50					
s.e.	2.042	2.473	4.391	2.905	7.353
unwtd. n	802	233	105	68	60
51 to 199					
s.e.	2.526	1.485	2.630	1.465	6.847
unwtd. n	802	233	105	68	60
200+					
s.e.	1.613	0.018	0.0	0.0	0.204
unwtd. n	802	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C1.5--Public schools attended by eighth graders, by urbanicity, by size of eighth grade: 1988

Size of eighth grade	Urban	Suburban	Rural
1 to 20			
s.e.	0.000	3.233	4.718
unwtd. n	202	328	272
21 to 30			
s.e.	2.810	1.779	2.709
unwtd. n	202	328	272
31 to 50			
s.e.	2.648	3.583	3.058
unwtd. n	202	328	272
51 to 199			
s.e.	4.814	3.949	3.913
unwtd. n	202	328	272
200+			
s.e.	4.727	3.190	1.501
unwtd. n	202	328	272

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C1.6--Schools attended by eighth graders, by institutional type, by grade span: 1988

Grade span	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Elementary					
s.e.	3.252	3.344	2.866	6.007	10.849
unwtd. n	576	205	95	63	47
6 to 8					
s.e.	2.244	0.058	0.057	0.0	0.745
unwtd. n	576	205	95	63	47
7 to 8					
s.e.	1.503	0.946	2.119	0.516	0.258
unwtd. n	576	205	95	63	47
Jr. high					
s.e.	1.159	0.739	1.714	0.0	1.032
unwtd. n	576	205	95	63	47
Other intermediate					
s.e.	1.924	0.0	0.0	0.0	0.0
unwtd. n	576	205	95	63	47
Other					
s.e.	2.721	3.139	0.971	5.987	10.854
unwtd. n	576	205	95	63	47

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C1.7--Public schools attended by eighth graders, by grade span, by urbanicity: 1988

Urbanicity	Elementary	6 to 8	7 to 8	Jr. high	Other intermediate	K-12 and other
Urban						
s.e.	5.812	4.922	3.608	3.411	2.644	1.292
unwtd. n	151	151	151	151	151	151
Suburban						
s.e.	4.867	3.892	2.514	1.939	2.994	3.756
unwtd. n	234	234	234	234	234	234
Rural						
s.e.	5.276	3.034	2.146	1.494	3.206	4.685
unwtd. n	191	191	191	191	191	191

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C1.8--Schools attended by eighth graders, by institutional type, by departmentalization: 1988

Departmentalization	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Self-contained					
s.e.	1.696	4.022	1.121	7.885	0.0
unwtd. n	784	222	100	64	58
Departmentalized					
s.e.	2.529	4.045	5.753	5.677	0.0
unwtd. n	784	222	100	64	58
Semi-department.					
s.e.	2.126	4.294	5.853	7.200	0.0
unwtd. n	784	222	100	64	58

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C1.9--Schools attended by eighth graders, by institutional type, by urbanicity: 1988

Urbanicity	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Urban					
s.e.	1.300	3.612	2.283	6.876	12.098
unwtd. n	802	233	105	68	60
Suburban					
s.e.	2.341	3.718	3.543	6.779	10.474
unwtd. n	802	233	105	68	60
Rural					
s.e.	2.580	3.867	2.721	7.279	11.476
unwtd. n	802	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.1--Schools attended by eighth graders, by institutional type, by percentage of minorities enrolled: 1988

Percent minority	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None					
s.e.	2.823	4.031	5.119	6.093	11.611
unwtd. n	718	218	97	63	58
<5 percent					
s.e.	2.479	2.545	4.688	2.704	2.788
unwtd. n	718	218	97	63	58
6 to 20 percent					
s.e.	2.264	2.545	4.351	2.909	9.988
unwtd. n	718	218	97	63	58
21 to 60 percent					
s.e.	1.536	2.072	3.614	2.618	4.859
unwtd. n	718	218	97	63	58
More than 60 percent					
s.e.	1.538	2.593	3.767	4.285	1.414
unwtd. n	718	218	97	63	58
More than 20 percent					
s.e.	2.142	3.372	4.741	5.473	5.108
unwtd. n	718	218	97	63	58

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.2--Schools attended by eighth graders, by institutional type, by percentage of black students enrolled: 1988

Percent black	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None					
s.e.	2.690	3.604	5.540	5.256	9.411
unwtd. n	796	228	103	67	58
<2 percent					
s.e.	1.517	1.455	2.580	1.725	4.361
unwtd. n	796	228	103	67	58
3 to 10 percent					
s.e.	1.465	2.050	4.014	1.879	5.554
unwtd. n	796	228	103	67	58
11 to 50 percent					
s.e.	1.489	1.809	3.092	2.323	4.813
unwtd. n	796	228	103	67	58
More than 50 percent					
s.e.	1.103	2.376	2.904	4.232	1.414
unwtd. n	796	228	103	67	58
More than 10 percent					
s.e.	1.800	2.833	3.964	4.634	5.049
unwtd. n	796	228	103	67	58

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.3--Schools attended by eighth graders, by institutional type, by percentage of Hispanic students enrolled: 1988

Percent Hispanic	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None					
s.e.	2.622	2.971	4.813	3.940	6.778
unwtd. n	796	228	103	67	58
<2 percent					
s.e.	1.916	1.825	3.642	1.606	5.552
unwtd. n	796	228	103	67	58
3 to 10 percent					
s.e.	1.905	2.213	4.216	2.430	3.299
unwtd. n	796	228	103	67	58
11 to 50 percent					
s.e.	1.405	1.735	3.114	2.206	0.113
unwtd. n	796	228	103	67	58
More than 50 percent					
s.e.	0.950	1.386	2.243	2.066	0.0
unwtd. n	796	228	103	67	58
More than 10 percent					
s.e.	1.637	2.102	3.464	3.005	0.113
unwtd. n	796	228	103	67	58

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.4--Schools attended by eighth graders, by institutional type, by percentage of Asian students enrolled: 1988

Percent Asian	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None					
s.e.	2.135	3.052	4.884	3.757	10.994
unwtd. n	796	228	103	67	58
<2 percent					
s.e.	1.752	1.919	3.545	2.155	4.170
unwtd. n	796	228	103	67	58
3 to 10 percent					
s.e.	1.074	2.245	3.648	2.999	7.328
unwtd. n	796	228	103	67	58
More than 10 percent					
s.e.	0.483	1.356	2.168	1.258	8.361
unwtd. n	796	228	103	67	58

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.5--Schools attended by eighth graders, by institutional type, by percentage of Native American students enrolled: 1988

Percent Native American	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None					
s.e.	1.877	0.306	0.640	0.030	1.428
unwtd. n	796	228	103	67	58
<2 percent					
s.e.	1.051	0.117	0.0	0.0	1.327
unwtd. n	796	228	103	67	58
3 to 10 percent					
s.e.	1.372	0.283	0.640	0.0	0.478
unwtd. n	796	228	103	67	58
More than 10 percent					
s.e.	1.072	0.0	0.0	0.0	0.0
unwtd. n	796	228	103	67	58

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.6--Schools attended by eighth graders, by institutional type, by percentage of students from single-parent families: 1988

Percent single-parent	Public	Private			
		All schools	Catholic	Other religious	Non-religious
None					
s.e.	1.793	4.005	2.216	7.533	12.326
unwtd. n	767	229	102	68	59
1 to 25 percent					
s.e.	2.712	4.379	5.060	7.313	12.128
unwtd. n	767	229	102	68	59
26 to 50 percent					
s.e.	2.264	1.820	4.148	0.120	2.011
unwtd. n	767	229	102	68	59
more than 50 percent					
s.e.	1.307	2.725	2.692	5.094	1.842
unwtd. n	767	229	102	68	59
More than 25 percent					
s.e.	2.515	3.163	4.683	5.093	2.769
unwtd. n	767	229	102	68	59

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.7--Urban public and Catholic schools attended by eighth graders, by percentage of students from single-parent families: 1988

	None	1 to 25 percent	26 to 50 percent	more than 50 percent
Urban public schools				
s.e.	0.0	4.252	4.443	4.552
unwtd. n	193	193	193	193
Urban Catholic schools				
s.e.	1.052	7.912	6.676	5.305
unwtd. n	44	44	44	44

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.8--Schools attended by eighth graders, by institutional type, by presence of students with limited English proficiency (LEP): 1988

	Public		Private				
Students with limited English	All schools	Urban schools	All schools	All Catholic	Urban Catholic	Other religious	Non-religious
None							
s.e.	1.090	3.725	1.846	1.988	3.952	3.442	0.0
unwtd. n	800	202	233	105	46	68	60
Some							
s.e.	1.090	3.725	1.846	1.988	3.952	3.442	0.0
unwtd. n	800	202	233	105	46	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.9--Schools attended by eighth graders, by institutional type, by type of future education plans: 1988

Education plans	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Drop out of high school					
s.e.	0.169	0.074	0.156	0.056	0.055
unwtd. n	802	233	105	68	60
Finish high school only					
s.e.	0.600	0.707	0.628	1.372	0.820
unwtd. n	802	233	105	68	60
Attend postsecondary vo-tech					
s.e.	0.485	1.100	0.666	2.233	1.384
unwtd. n	802	233	105	68	60
Attend some college					
s.e.	0.818	1.525	1.070	3.044	2.124
unwtd. n	802	233	105	68	60
Finish 4-year college					
s.e.	1.114	2.346	1.572	4.558	4.418
unwtd. n	802	233	105	68	60
Attend graduate school					
s.e.	0.745	1.987	1.675	3.510	6.828
unwtd. n	802	233	105	68	60
Any postsecondary education					
s.e.	0.643	0.713	0.649	1/377	0.821
unwtd. n	802	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.10--Public schools attended by eighth graders, by urbanicity, by type of future education plans: 1988

Education plans	Urban	Suburban	Rural
Drop out of high school			
s.e.	0.301	0.211	0.280
unwtd. n	202	328	272
Finish high school only			
s.e.	0.879	0.764	1.017
unwtd. n	202	328	272
Attend postsecondary vo-tech			
s.e.	0.662	0.662	0.803
unwtd. n	202	328	272
Attend some college			
s.e.	1.035	0.748	1.442
unwtd. n	202	328	272
Finish 4-year college			
s.e.	1.344	1.220	1.935
unwtd. n	202	328	272
Attend graduate school			
s.e.	1.150	1.106	1.149
unwtd. n	202	328	272
Any postsecondary education			
s.e.	0.969	0.836	1.082
unwtd. n	202	328	272

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.11--Schools attended by eighth graders, by institutional type, by percentage of students with high scores on psychological tests: 1988

	Public	Private			
Test		All schools	Catholic	Other religious	Non-religious
Self-concept					
s.e.	1.076	2.464	1.621	4.968	2.267
unwtd. n	802	233	105	68	60
Locus of control					
s.e.	0.822	2.361	1.763	4.669	3.509
unwtd. n	802	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.12--Schools attended by eighth graders, by institutional type, by average score of students on achievement tests: 1988

Test	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Math					
s.e.	0.277	0.481	0.428	0.904	1.787
unwtd. n	802	228	105	68	60
Reading					
s.e.	0.287	0.422	0.348	0.841	1.158
unwtd. n	802	227	105	68	60
Science					
s.e.	0.297	0.460	0.392	0.901	1.271
unwtd. n	802	227	105	68	60
History					
s.e.	0.357	0.430	0.401	0.781	1.450
unwtd. n	802	227	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C2.13--Public schools attended by eighth graders, by urbanicity, by average score of students on achievement tests: 1988

Test	Urban	Suburban	Rural
Math			
s.e.	0.439	0.509	0.378
unwtd. n	202	328	272
Reading			
s.e.	0.429	0.369	0.467
unwtd. n	202	328	272
Science			
s.e.	0.517	0.475	0.422
unwtd. n	202	328	272
History			
s.e.	0.509	0.459	0.586
unwtd. n	202	328	272

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.1--Schools attended by eighth graders, by institutional type, by length of school year: 1988

	Public	Private			
Length of school year		All schools	Catholic	Other religious	Non-religious
130 to 174 days					
s.e.	1.404	2.573	3.572	4.316	6.038
unwtd. n	799	228	104	65	59
175 days					
s.e.	2.097	2.942	3.518	5.028	10.462
unwtd. n	799	228	104	65	59
176-179 days					
s.e.	1.651	3.404	3.649	6.326	2.446
unwtd. n	799	228	104	65	59
180 days					
s.e.	2.589	4.377	1.675	4.716	10.066
unwtd. n	799	228	104	65	59
>180 days					
s.e.	1.260	2.493	1.675	4.716	10.066
unwtd. n	799	228	104	65	59

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.2--Public schools attended by eighth graders, by urbanicity, by length of school year: 1988

Length of school year	Urban	Suburban	Rural
130 to 174 days			
s.e.	0.591	1.446	2.537
unwtd. n	201	326	272
175 days			
s.e.	3.247	3.673	3.259
unwtd. n	201	326	272
176-179 days			
s.e.	2.892	2.092	2.746
unwtd. n	201	326	272
180 days			
s.e.	4.534	3.966	4.135
unwtd. n	201	326	272
>180 days			
s.e.	3.963	2.659	1.188
unwtd. n	201	326	272

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.3--Schools attended by eighth graders, by institutional type, by characteristics of the school day: 1988

	Public	Private			
School day features		All schools	Catholic	Other religious	Non-religious
Avg. day length (hrs.)					
s.e.	0.028	0.044	0.053	0.076	0.106
unwtd. n	798	233	105	68	60
Avg. classes/day					
s.e.	0.047	0.081	0.082	0.155	0.179
unwtd. n	794	229	104	65	60
Avg. class length (min.)					
s.e.	0.302	0.628	0.549	1.198	1.558
unwtd. n	799	228	103	65	60
Avg. daily attend. (%)					
s.e.	0.242	0.369	0.410	0.514	2.232
unwtd. n	787	228	102	66	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.4--Schools attended by eighth graders, by urbanicity, by characteristics of the school day: 1988

School day features	Urban		Suburban	Rural
	Public	Catholic	Public	Public
Avg. day length (hrs.)				
s.e.	0.060	0.078	0.041	0.045
unwtd. n	201	46	326	271
Avg. classes/day				
s.e.	0.057	0.133	0.071	0.077
unwtd. n	200	46	327	267
Avg. class length (min.)				
s.e.	0.422	0.892	0.468	0.498
unwtd. n	201	45	327	271
Avg. daily attend. (%)				
s.e.	0.495	0.589	0.210	0.423
unwtd. n	200	45	321	266

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.5--Schools attended by eighth graders, by institutional type, by pupil/teacher ratio: 1988

Pupil/teacher ratios	Public	Private			
		All schools	Catholic	Other religious	Non-religious
<15					
s.e.	2.656	3.797	3.217	6.942	12.239
unwtd. n	802	233	105	68	60
16 to 20					
s.e.	2.499	4.153	4.802	7.365	5.311
unwtd. n	802	233	105	68	60
21 to 25					
s.e.	1.471	3.466	4.967	5.360	8.574
unwtd. n	802	233	105	68	60
>25					
s.e.	1.094	3.477	5.429	5.041	10.376
unwtd. n	802	233	105	68	60
Average ratio					
s.e.	0.262	0.495	0.593	0.799	1.873
unwtd. n	802	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.6--Schools attended by eighth graders, by urbanicity, by pupil/teacher ratio: 1988

Pupil/teacher ratios	Urban		Suburban	Rural
	Public	Catholic	Public	Public
<15				
s.e.	4.463	0.815	3.927	4.189
unwtd. n	202	46	328	272
16 to 20				
s.e.	4.543	7.991	3.831	3.859
unwtd. n	202	46	328	272
21 to 25				
s.e.	3.005	7.344	2.439	2.200
unwtd. n	202	46	328	272
>25				
s.e.	1.379	7.604	1.515	1.809
unwtd. n	202	46	328	272
Average ratio				
s.e.	0.363	0.747	0.363	0.433
unwtd. n	202	46	328	272

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.7--Schools attended by eighth graders, by pupil/teacher ratio, by school size: 1988

School size	Public		Private	
	% with ratio <15:1	Average ratio	% with ratio <15:1	Average ratio
1 to 249				
s.e.	7.666	0.945	5.911	0.696
unwtd. n	49	49	85	85
250 to 499				
s.e.	4.560	0.342	3.924	0.654
unwtd. n	190	190	83	83
500 to 999				
s.e.	2.869	0.212	7.919	0.983
unwtd. n	412	412	60	60
1000+				
s.e.	3.812	0.360	Low-N	Low-N
unwtd. n	151	151	Low-N	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.8-Public schools attended by eighth graders, by pupil/teacher ratio, by percentage minorities enrolled: 1988

Percent minorities	Pupil/teacher ratio
None	
s.e.	0.508
unwtd. n	84
< 5%	
s.e.	0.679
unwtd. n	173
6% to 20%	
s.e.	0.540
unwtd. n	180
21% to 60%	
s.e.	0.439
unwtd. n	130
> 60%	
s.e.	0.540
unwtd. n	151

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.9--Schools attended by eighth graders, by institutional type, by racial-ethnic characteristics of the faculty: 1988

Race-ethnicity	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Avg. % Asian					
s.e.	0.161	0.103	0.214	0.079	0.201
unwtd. n	785	232	105	68	59
Avg. % Hispanic					
s.e.	0.346	1.012	0.546	2.072	0.204
unwtd. n	784	232	105	68	59
Avg. % black					
s.e.	0.818	1.709	1.157	3.444	1.457
unwtd. n	784	232	105	68	59
Avg. % Native American					
s.e.	0.269	0.123	0.259	0.100	0.019
unwtd. n	786	232	105	68	59
Avg. % white					
s.e.	1.108	1.997	1.407	4.001	1.507
unwtd. n	785	232	105	68	59

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.10--Schools attended by eighth graders, by institutional type, by graduate education of the faculty: 1988

Graduate education	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Avg. % with graduate degree					
s.e.	1.364	2.602	2.305	4.670	8.948
unwtd. n	775	232	105	67	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.11--Public schools attended by eighth graders, by percentage of faculty with graduate degrees, by urbanicity: 1988

Graduate education	Avg. % with graduate degree
Urban	
s.e.	2.632
unwtd. n	192
Suburban	
s.e.	1.861
unwtd. n	315
Rural	
s.e.	2.012
unwtd. n	268

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C3.12--Schools attended by eighth graders, by institutional type, by student perceptions of teacher quality: 1988

	Public	Private			
Student perceptions		All schools	Catholic	Other religious	Non-religious
% low teacher rating					
s.e.	2.315	2.782	4.370	4.160	1.633
unwtd. n	801	233	105	68	60
% medium teacher rating					
s.e.	2.690	4.042	5.758	6.037	12.312
unwtd. n	801	233	105	68	60
% high teacher rating					
s.e.	2.252	4.354	5.647	6.871	12.314
unwtd. n	801	233	105	68	60
Avg. teacher rating					
s.e.	0.011	0.020	0.025	0.035	0.027
unwtd. n	801	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.1--Schools attended by eighth graders, by institutional type, by curriculum requirements: 1988

	Public	Private			
		All schools	Catholic	Other religious	Non-religious
One year math required					
s.e.	0.943	0.0	0.0	0.0	0.0
unwtd. n	801	233	105	68	60
One year reading required					
s.e.	0.669	0.0	0.0	0.0	0.0
unwtd. n	801	233	105	68	60
One year science required					
s.e.	1.495	2.770	0.405	5.729	0.680
unwtd. n	801	233	105	68	60
One year history required					
s.e.	1.360	2.839	0.469	5.874	0.932
unwtd. n	801	233	105	68	60
Computer education required					
s.e.	1.844	4.150	5.716	6.397	12.305
unwtd. n	793	229	104	65	60
Foreign language required					
s.e.	1.418	2.557	3.475	3.405	12.529
unwtd. n	794	230	104	66	60
Art required					
s.e.	2.464	4.055	5.011	7.155	10.910
unwtd. n	798	233	105	68	60
Music required					
s.e.	2.516	4.108	4.676	7.422	11.002
unwtd. n	795	232	105	67	60
Physical education required					
s.e.	2.061	3.257	2.963	6.188	0.821
unwtd. n	797	233	105	68	60
Family-sex education required					
s.e.	1.784	3.008	5.352	2.998	10.639
unwtd. n	799	232	105	67	60
Ethics required					
s.e.	0.767	4.251	5.670	6.977	10.383
unwtd. n	799	231	105	66	60
Religion required					
s.e.	0.387	2.041	0.0	2.709	10.392
unwtd. n	801	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.2--Public schools attended by eighth graders, by size of school, by curriculum requirements: 1988

Requirements	1 to 249	250 to 499	500 to 999	1,000+
One year math required				
s.e.	2.881	1.903	0.138	0.0
unwtd. n	49	190	411	151
One year reading required				
s.e.	2.881	0.0	0.091	0.0
unwtd. n	49	190	411	151
One year science required				
s.e.	5.745	1.478	1.214	2.241
unwtd. n	49	190	411	151
One year history required				
s.e.	3.923	2.730	0.984	1.034
unwtd. n	49	190	411	151
Computer education required				
s.e.	5.562	2.936	2.473	3.284
unwtd. n	48	189	408	148
Foreign language required				
s.e.	3.180	2.884	1.883	3.828
unwtd. n	47	189	408	150
Art required				
s.e.	7.026	4.431	2.816	4.874
unwtd. n	49	190	409	150
Music required				
s.e.	7.428	4.592	2.800	4.803
unwtd. n	49	189	408	149
Physical education required				
s.e.	7.144	2.658	2.142	2.349
unwtd. n	49	189	409	150
Family-sex education required				
s.e.	5.399	2.952	2.061	3.145
unwtd. n	49	190	411	149
Ethics required				
s.e.	2.501	0.836	1.175	1.044
unwtd. n	49	190	410	150
Religion required				
s.e.	0.0	0.0	1.071	0.0
unwtd. n	48	187	410	150

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.3--Schools attended by eighth graders, by institutional type, by extracurricular offerings: 1988

Type of Activity	Public	Private			
		All schools	Catholic	Other religious	Non-religious
% with fine arts					
s.e.	2.052	3.917	3.486	7.020	12.006
unwtd. n	802	233	105	68	60
% with academic clubs					
s.e.	2.572	4.479	5.202	7.522	12.845
unwtd. n	802	233	105	68	60
% with student council					
s.e.	2.714	3.774	5.013	5.749	10.639
unwtd. n	802	233	105	68	60
% with paper/yearbook					
s.e.	2.695	4.250	4.885	7.304	10.429
unwtd. n	802	233	105	68	60
% with sports/cheerleading					
s.e.	1.172	3.733	2.883	7.041	1.467
unwtd. n	802	233	105	68	60
% with service clubs					
s.e.	2.484	3.815	5.761	4.943	12.288
unwtd. n	802	232	105	67	60
% with religious clubs					
s.e.	1.345	4.204	5.367	6.905	8.705
unwtd. n	802	233	105	68	60
% with vocational clubs					
s.e.	1.847	1.876	1.723	3.621	0.155
unwtd. n	801	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.4--Schools attended by eighth graders, by size of school, by extracurricular offerings: 1988

Type of Activity	Public				Private			
	1 to 249	250 to 499	500 to 999	1,000+	1 to 249	250 to 499	500 to 999	1,000+
% with fine arts								
s.e.	7.398	2.308	1.042	0.268	5.915	5.324	2.150	Low-N
unwtd. n	49	190	412	151	85	83	60	Low-N
% with acad. clubs								
s.e.	7.883	4.371	2.311	1.362	6.608	5.944	7.545	Low-N
unwtd. n	49	190	412	151	85	83	60	Low-N
% with student council								
s.e.	8.213	4.163	1.654	4.041	5.409	6.318	7.310	Low-N
unwtd. n	49	190	412	151	85	83	60	Low-N
% with paper/yearbook								
s.e.	7.787	4.811	2.774	3.078	6.504	5.918	5.457	Low-N
unwtd. n	49	190	412	151	85	83	60	Low-N
% with sports/cheerlead.								
s.e.	4.644	0.400	1.151	0.657	6.051	3.074	4.828	Low-N
unwtd. n	49	190	412	151	85	83	60	Low-N
% with service clubs								
s.e.	6.051	4.235	3.070	4.822	5.354	6.166	8.383	Low-N
unwtd. n	49	190	412	151	85	83	60	Low-N
% with religious clubs								
s.e.	4.320	2.253	1.233	2.256	6.295	6.220	8.484	Low-N
unwtd. n	49	190	412	151	85	83	60	Low-N
% with voced clubs								
s.e.	5.082	3.366	2.260	3.934	3.128	0.0	3.355	Low-N
unwtd. n	49	190	412	151	85	83	60	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.5--Schools attended by eighth graders, by institutional type, by type of gifted and talented (GATE) programs: 1988

Type of program	Public	Private			
		All schools	Catholic	Other religious	Non-religious
No GATE program					
s.e.	2.709	2.904	4.322	4.105	9.726
unwtd. n	802	233	105	68	60
Outside supplemental GATE					
s.e.	2.348	1.943	3.615	2.283	0.0
unwtd. n	802	233	105	68	60
GATE grouped together					
s.e.	1.210	0.862	0.727	0.0	8.306
unwtd. n	802	233	105	68	60
GATE enrichment only					
s.e.	1.569	1.814	2.697	2.873	2.328
unwtd. n	802	233	105	68	60
GATE inside supplemental					
s.e.	1.585	1.006	0.289	2.120	0.703
unwtd. n	802	233	105	68	60
Other GATE					
s.e.	1.406	0.513	0.327	0.0	5.484
unwtd. n	802	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.6--Schools attended by eighth graders with no gifted and talented (GATE) programs, by institutional type, by size of school: 1988

Size of school	Public	Private
1 to 249		
s.e.	8.195	3.852
unwtd. n	49	85
250 to 499		
s.e.	4.542	5.155
unwtd. n	190	83
500 to 999		
s.e.	2.825	8.060
unwtd. n	412	60
1000+		
s.e.	4.871	Low-N
unwtd. n	151	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.7--Schools attended by eighth graders, by institutional type, by percentage of students enrolled in special programs: 1988

Type of program	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Bilingual education					
s.e.	0.208	1.067	0.036	2.279	0.545
unwtd. n	800	231	104	67	60
ESL					
s.e.	0.194	0.039	0.059	0.059	0.090
unwtd. n	798	231	104	67	60
Special education					
s.e.	0.261	1.018	0.038	0.465	10.141
unwtd. n	800	231	104	67	60
GATE					
s.e.	0.454	0.695	0.553	0.796	5.282
unwtd. n	786	217	99	61	57
Job training					
s.e.	0.164	0.126	0.0	0.0	1.402
unwtd. n	799	231	104	67	60
Remedial math					
s.e.	0.471	1.046	0.695	0.407	10.165
unwtd. n	801	232	105	67	60
Remedial English					
s.e.	0.547	1.065	0.788	0.439	10.143
unwtd. n	801	232	105	67	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.8--Public schools attended by eighth graders in 1988, by urbanicity, by percentage of students enrolled in special programs: 1988

Type of program	Urban	Suburban	Rural
Bilingual education			
s.e.	0.506	0.351	0.297
unwtd. n	202	327	271
ESL			
s.e.	0.766	0.346	0.214
unwtd. n	200	327	271
Special education			
s.e.	0.546	0.366	0.409
unwtd. n	202	328	270
GATE			
s.e.	1.019	0.726	0.670
unwtd. n	199	322	265
Job training			
s.e.	0.985	0.125	0.131
unwtd. n	202	327	270
Remedial math			
s.e.	2.126	0.534	0.498
unwtd. n	202	328	271
Remedial English			
s.e.	2.105	0.633	0.648
unwtd. n	202	328	271

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.9--Schools attended by eighth graders, by institutional type, by influence of counselors on assignments to high school classes:1988

Influence of counselor	Public	Private			
		All	Catholic	Other religious	Non-religious
A lot					
s.e.	2.593	3.589	3.859	6.329	12.342
unwtd. n	802	231	105	66	60
Moderate					
s.e.	2.638	3.865	4.773	6.691	10.281
unwtd. n	802	231	105	66	60
A little					
s.e.	1.842	3.094	4.208	5.034	8.636
unwtd. n	802	231	105	66	60
None					
s.e.	1.999	4.280	5.575	7.251	8.857
unwtd. n	802	231	105	66	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.10--Schools attended by eighth graders, by influence of counselors on assignments to high school classes, by size of school: 1988

Size of school	Public		Private	
	A lot	None	A lot	None
1 to 249				
s.e.	7.471	6.777	4.877	6.442
unwtd. n	49	49	84	84
250 to 499				
s.e.	4.460	3.062	6.134	5.913
unwtd. n	190	190	82	82
500 to 999				
s.e.	3.0124	1.487	8.188	6.637
unwtd. n	412	412	60	60
1000+				
s.e.	4.890	1.031	Low-N	Low-N
unwtd. n	151	151	Low-N	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.11--Schools attended by eighth graders, by institutional type, by admissions policies: 1988

Admissions policy	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Formal application					
s.e.	1.696	3.635	4.635	6.333	0.0
unwtd. n	801	233	105	68	60
Geography					
s.e.	1.555	--	--	--	--
unwtd. n	800	--	--	--	--
Geography and transfer					
s.e.	2.267	--	--	--	--
unwtd. n	799	--	--	--	--
Racial balance					
s.e.	0.725	--	--	--	--
unwtd. n	799	--	--	--	--

-- Not applicable.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C4.12--Schools attended by eighth graders, by institutional type, by retention policies: 1988

	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Fail reading test					
s.e.	1.972	2.375	3.973	3.142	5.575
unwtd. n	798	231	105	66	60
Fail math test					
s.e.	1.822	2.450	3.686	3.749	5.717
unwtd. n	798	231	105	66	60
Fail science test					
s.e.	1.379	1.984	3.004	2.973	5.450
unwtd. n	797	231	105	66	60
Fail English test					
s.e.	1.761	2.433	3.693	3.671	6.073
unwtd. n	797	231	105	66	60
Fail history test					
s.e.	1.435	1.943	3.494	2.198	5.450
unwtd. n	798	231	105	66	60
Fail required course					
s.e.	2.834	4.471	5.149	7.497	12.294
unwtd. n	749	220	95	65	60
No pass/no play					
s.e.	2.251	4.350	5.637	7.270	11.278
unwtd. n	799	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.1--Schools attended by eighth graders, by institutional type, by level of teacher engagement: 1988

Level of engagement	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Low					
s.e.	2.599	2.900	3.473	4.750	11.107
unwtd. n	801	233	105	68	60
Medium					
s.e.	2.737	4.186	4.985	7.271	11.544
unwtd. n	801	233	105	68	60
High					
s.e.	2.174	4.178	5.383	6.960	12.125
unwtd. n	801	233	105	68	60
Average score					
s.e.	0.032	0.042	0.052	0.069	0.154
unwtd. n	801	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.2--Schools attended by eighth graders, by level of teacher engagement, by size of school: 1988

Size of school	Public				Private			
	Low	Medium	High	Average score	Low	Medium	High	Average score
1 to 249								
s.e.	7.779	8.104	7.089	0.90	4.064	6.244	6.237	0.056
unwtd. n	49	49	49	49	85	85	85	85
250 to 499								
s.e.	4.450	4.649	3.584	0.056	4.892	6.153	6.174	0.067
unwtd. n	189	189	189	189	83	83	83	83
500 to 999								
s.e.	2.940	3.054	1.763	0.033	5.762	8.487	8.517	0.130
unwtd. n	412	412	412	412	60	60	60	60
1000+								
s.e.	4.698	4.894	2.752	0.052	Low-N	Low-N	Low-N	Low-N
unwtd. n	151	151	151	151	Low-N	Low-N	Low-N	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.3--Public schools attended by eighth graders, by urbanicity, by level of teacher engagement: 1988

Level of engagement	Urban	Suburban	Rural
Low			
s.e.	4.163	3.956	4.100
unwtd. n	202	328	271
Medium			
s.e.	4.366	4.030	4.325
unwtd. n	202	328	271
High			
s.e.	1.956	2.596	3.701
unwtd. n	202	328	271
Average score			
s.e.	0.049	0.043	0.051
unwtd. n	202	328	271

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.4--Schools attended by eighth graders, by institutional type, by level of good behavior: 1988

	Public	Private			
Level of good behavior		All schools	Catholic	Other religious	Non-religious
Low					
s.e.	2.221	1.303	0.0	2.218	8.747
unwtd. n	802	233	105	68	60
Medium					
s.e.	2.626	4.418	5.695	7.054	12.149
unwtd. n	802	233	105	68	60
High					
s.e.	2.014	4.439	5.695	7.176	10.716
unwtd. n	802	233	105	68	60
Average score					
s.e.	0.023	0.020	0.021	0.033	0.080
unwtd. n	802	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.5--Schools attended by eighth graders, by urbanicity, by level of good behavior: 1988

Level of good behavior	Urban		Suburban	Rural
	Public	Catholic	Public	Public
Low				
s.e.	4.540	0.0	3.154	3.375
unwtd. n	202	46	328	272
Medium				
s.e.	4.533	7.987	3.544	4.238
unwtd. n	202	46	328	272
High				
s.e.	0.634	7.987	2.049	3.535
unwtd. n	202	46	328	272
Average score				
s.e.	0.034	0.30	0.039	0.034
unwtd. n	202	46	328	272

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.6--Schools attended by eighth graders, by institutional type, by level of emphasis on academics: 1988

Level of emphasis	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Low					
s.e.	2.339	3.277	2.286	6.071	12.025
unwtd. n	801	233	105	68	60
Medium					
s.e.	2.727	4.404	5.674	7.237	12.156
unwtd. n	801	233	105	68	60
High					
s.e.	2.356	4.265	5.487	7.130	10.943
unwtd. n	801	233	105	68	60
Average score					
s.e.	0.032	0.050	0.044	0.081	0.262
unwtd. n	801	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.7--Schools attended by eighth graders, by institutional type, by degree of unrestrictiveness: 1988

Degree of unrestrictiveness	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Low					
s.e.	2.698	4.220	5.581	6.833	12.201
unwtd. n	802	233	105	68	60
Medium					
s.e.	2.464	3.908	5.488	5.916	12.865
unwtd. n	802	233	105	68	60
High					
s.e.	2.676	2.391	2.026	4.512	8.967
unwtd. n	802	233	105	68	60
Average score					
s.e.	0.018	0.021	0.021	0.039	0.065
unwtd. n	802	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.8--Schools attended by eighth graders, by degree of unrestrictiveness and urbanicity: 1988

Degree of unrestrictiveness	Urban		Suburban	Rural
	Public	Catholic	Public	Public
Low				
s.e.	3.080	8.091	3.613	4.315
unwtd. n	202	46	328	272
Medium				
s.e.	2.687	7.984	3.709	3.986
unwtd. n	202	46	328	272
High				
s.e.	3.736	3.714	4.175	3.949
unwtd. n	202	46	328	272
Average score				
s.e.	0.018	0.033	0.021	0.030
unwtd. n	202	46	328	272

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.9--Schools attended by eighth graders, by degree of unrestrictiveness, by size of school: 1988

Size of school	Public				Private			
	Low	Medium	High	Average score	Low	Medium	High	Average score
1 to 249								
s.e.	8.247	6.610	7.300	0.059	5.896	5.440	3.162	0.031
unwtd. n	49	49	49	49	85	85	85	85
250 to 499								
s.e.	3.889	4.583	4.352	0.022	6.372	6.332	4.632	0.031
unwtd. n	190	190	190	190	83	83	83	83
500 to 999								
s.e.	1.848	2.683	2.947	0.012	8.562	8.334	5.248	0.042
unwtd. n	412	412	412	412	60	60	60	60
1000+								
s.e.	0.491	3.507	3.534	0.006	Low-N	Low-N	Low-N	Low-N
unwtd. n	151	151	151	151	Low-N	Low-N	Low-N	Low-N

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

Table C5.10--Schools attended by eighth graders, by institutional type, by level of discipline: 1988

Level of discipline	Public	Private			
		All schools	Catholic	Other religious	Non-religious
Low					
s.e.	2.450	2.528	3.028	4.208	9.632
unwtd. n	801	233	105	68	60
Medium					
s.e.	2.701	4.372	5.398	7.432	9.876
unwtd. n	801	233	105	68	60
High					
s.e.	2.139	4.360	5.289	7.386	12.558
unwtd. n	801	233	105	68	60
Average score					
s.e.	0.030	0.045	0.040	0.068	0.289
unwtd. n	801	233	105	68	60

SOURCE: U.S. Department of Education, National Center for Educational Statistics, National Education Longitudinal Study of 1988, Base Year Survey.

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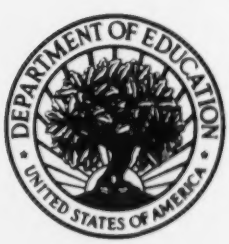

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